No matter how good your roughage . . . or how plentiful your grain . . . Larro Cattle Fattener can help your cattle produce more finished beef per ton of roughage—and per pound of grain fed.

Experienced cattlemen know how important high finish is to profits. Experienced Larro Research workers know how to build a cattle fattener that helps develop the bloom—the even distribution of solid beef—that spells finish. At the same time, your cattle make more efficient use of their roughage and grains because multiple-protein Larro Cattle Fattener helps fill the nutritional gaps in grain-roughage rations.

For earlier marketing of cattle with higher finish, ask your Larro dealer for Larro Cattle Fattener.
WHEN THEY CAN'T
Come and get it...

D4-doz~er Takes it to 'EM!

Stockman C. C. Forrester, Okanogan, Wash., has the answer to the blizzard that tries to isolate his cattle, or complicate living.

His herd doesn't miss a meal. Family food and fuel supplies stay normal. His sick folks get prompt medical attention. (His D4 bucked deep drifts, to get his hired man's seriously ill wife to the doctor in time.) His mail-box doesn't yawn till a thaw admits the carrier.

For his "Caterpillar" Diesel D4 Tractor, equipped with No. 4A Bulldozer, can open roads, clear feed trails and haul "till the cows come home."

The Diesel D4's famous starting system is built to function positively even in Klondike cold. And the D4 has all-weather, all-winter traction for anything Old Man Winter hatches! So it's easy for Mr. Forrester's D4 to clear a feeding strip with blade lowered, while pulling the sleigh-mounted rack of feed. "Couldn't run the ranch without our D4," he says. "Best piece of equipment ever designed for farm use."

Winter, Spring, Summer, Fall—it's routine for a "Caterpillar" Diesel Tractor to beat weather emergency, and deliver its heavy-duty power, when and where needed. That's why ranchers multiply manpower efficiency and keep the schedule under control with this all-season power—whether plowing snow or feed ground; building ponds or driving a belt!

Caterpillar Tractor Co., San Leandro, California, Peoria, Illinois
HAVE YOU SENT YOUR ADVERTISEMENT FOR THE

Annual

PLANS & PROGRESS

Issue of

WESTERN Livestock Journal

(In the mails December 15)

BREEDERS of registered beef cattle, horses, hogs and sheep, you’ll be especially proud of your advertising in this big PLANS & PROGRESS Issue. It’s constructive! It’s vital! It’s a business-builder for you in 1951. In pictures, in editorial material, in advertising, the PLANS & PROGRESS Issue sums up the PROGRESS of 1950 and points up the PLANS for 1951 in the West’s livestock industry.

YOUR ADVERTISING IN THIS ISSUE

... can effectively express appreciation to your 1950 customers.

... can effectively cite your herd’s 1950 showing, selling and breeding achievements.

... should point to the PLANS that you have for 1951—giving prospective customers, as well as old customers an idea of the breeding, type, quality and number of breeding stock you will be offering in 1951.

... should open the door and help you get the full benefit of the 1951 market—which promises to be the best in history in almost every line of pure-bred livestock.

Advertising forms close November 30. To be sure that your herd is represented in this important issue, rush details for your advertisement today, to—

WESTERN LIVESTOCK JOURNAL, 4511 Produce Plaza, Los Angeles 58
EARLY AND SUCCESSFUL END of the war in Korea may have greater effect upon U. S. military expansion than top government officials think. Congressmen are likely to think long and hard about the effects upon our economy before going on an all-out money spending spree to give military men everything they want, and there will be inclination to consider the advice of former President Hoover to go slow in handing billions over to European countries that seem to lack the will to do something on their own account about defending themselves. But whatever happens, it seems certain that we will have the largest peacetime budget in history, higher taxes, more spending, record employment at record wages, probably added inflation over the long pull.

IT HARDLY SEEMS POSSIBLE that serious consideration is being given to price ceilings on meat. For one thing, there is a lot of meat in sight, according to all available government statistics. But most important, it was pretty well proven during World War II that government price ceilings and rationing of meat provided one of the worst headaches the bureaucrats ever had. Certainly, price controls would be even more difficult in peacetime when workers have so much money in their pockets. Big trouble is that once an effort is made to enforce price ceilings on one thing, a lot of other segments of our economy are thrown out of kilter.

USDA REPORTS CATTLE FEEDLOTS filled the country over, with a big increase in the Middlewest, also in California and Arizona. Cattle feeders have the most expensive feedlot cattle in all history. During nearly every week for the past three months, steers going out of Middlewestern markets have averaged better than 27c a pound, just about 7c higher than a year ago and by far the highest costs on record.

SUPPLY OF LAMBS IN FEEDLOTS is smaller than at any time on record, due to the smallest lamb crop in history, a lamb crop 33% smaller than the average for the last 10 years. California is one of the few states showing an increase in lamb feeding. Costs of feeder lambs are highest in history. One reason for the decrease in the available supply of feeder lambs is the strong demand for ewe lambs as replacements in farm and range flocks.

LIVESTOCK INTERESTS might well work toward making it easier for women to buy meat. This could be done by working with retailers and union meat cutters to have retail shops open evenings. There are more women working than ever before, with one out of every three on U. S. payrolls now being women. Women workers now number 17 million, an increase of 600,000 having been added in July alone. Many of these women workers are married, can't shop during working hours. If they're to get meat for their families, many must buy after 6 p.m. or not at all. As more women join worker ranks, it will mean even greater demand for small cuts from light-weight carcasses, cuts that can be properly cooked in shortest possible time.
It Takes —

TEAMWORK!

The Los Angeles Union Stock Yards is rapidly being recognized as the marketing center of the West for in no other part of the country has the population increased as it has in this area. This tremendous growth has resulted from teamwork. Expanding industries have drawn the people to these ever growing production lines.

The big job at all times is the problem to feed this great population. California alone does not produce near enough livestock to fill the meat demand. That is why livestock is being sent to this great market from all of the 11 Western states and also to the East as far as the Missouri River.

Each day the meat demand grows greater and the long arm of demand stretches further East. Now is the time to take advantage of this high market so consign your next shipment to the

GREAT WESTERN MARKET
FUL-O-PEP's ADDED NUTRITIONAL STRENGTH promotes easy calving...big calf crops!

Even when range conditions are tough, Ful-O-Pep's high vitamin and mineral content helps promote easy calving and big calf crops.

When you figure your results...the number of calves...the weight of calves...and the condition of your cows against your feed cost, you'll agree: Ful-O-Pep Range Cubes are low cost!

So feed Ful-O-Pep this year to help boost your range profits.
It's a ticklish business ... warming cattle up to full feed—unless you put 'em on Molasses Dried Beet Pulp right from the start.

The beauty of starting cattle out on Molasses Dried Beet Pulp is that you're putting gains on them all the time you're conditioning them to a high grain ration. Authorities agree that Molasses Dried Beet Pulp can be substituted pound for pound for grains up to 50% of the ration ... and it makes a more economical ration, too!

Cattlemen who know keep Molasses Dried Beet Pulp in the ration right on through because it gives that extra glossy finish that helps bring top prices at market.

Get 'em "on feed" faster, and keep them on feed with Molasses Dried Beet Pulp. There just isn't any good substitute.

AMERICAN CRYSTAL SUGAR COMPANY
HOLLY SUGAR CORPORATION
SINTON & BROWN COMPANY
SPRECKELS SUGAR COMPANY

ever, continue to bring premium prices and there has been a good trade on stocker and feeder offerings. Hog prices have been hovering around the lowest point of the season with marketing now running rather heavy. Sheep and lamb prices have been supported by scarcity of numbers.

These weak spots in the market have by no means dampened the ambition of most livestock operators throughout the country. There were almost daily reports that the call for replacement stock was exceeding the supply. Long-range thinking appeared to be that the coming months will see more inflation. There are indications that there will be a continual tightening up on production of consumer goods—which should make more money available for food items. When stiff credit controls were in force during World War II, the public gave strong support to the food market. A similar situation could result again.

Moderate Supplies. It has been interesting to watch the development in the livestock market in the last 30 days. All year long we have been told that the supply of longfed cattle, particularly in the Midwest, was far greater than last year. To the average person this would suggest that prices on better grades of cattle could work lower, but instead, prices have actually moved higher. Supplies of cattle at the 12 leading markets have been only moderate and not much different than during the same time of last year. There has been a bigger percentage of fed cattle in this year's supply, but never has there been a time when the supply of real longfeds was too great for the demand. In fact, it has been running a little under the demand and prices for choice grading offering at the larger river markets have been on
From range country experiment stations come newsworthy reports, telling of a sire selection method that is something new in livestock improvement. A method that may help you select sires whose offspring should make faster gains, turn your feeds into meat at less cost.

You want cattle, hogs and lambs that will make you more for the grass or feed you put into them. That's why you will pay a big price for a bull, boar or ram that you hope will improve your herd. But it's often difficult, or too expensive, to buy proven sires. And even with fine pedigrees, appearance and conformation, the young animal that looks best to you may prove disappointing as a sire. Now, the experiments indicate, this new method of "gain-testing" may enable you to use more of your eyes and the animal's pedigree in selecting your sires. Here's how it has worked out:

At weaning time a number of bull calves were selected as possible sire material. The weight of each individual was recorded. Then, working into a feed lot, they were fed the same ration as fattening steers would get. After several weeks on feed they were weighed again individually. Regularly controlled tests—by the U. S. D. A. and several co-operating states—have shown that the bulls which make the best gains usually prove to be the best sires in the lot. This test is not "dead sure." But in over 90% of the cases reported sires were able to pass along to their offspring their own fast-gaining ability.

This gain-test method is a aid to your experience and judgment in sire selection. It's good not only for cattle, but similar tests are valuable in sheep and hog raising as well. It may save you time and money. It may speed up your breed improvement program—perhaps more than any other recent development in breeding practice. Ask your county agent or vocational agricultural teacher for information on gain-testing of sires. It might be highly profitable for you.

Martha Logan's Recipe for
SPECIAL HOT TURKEY SANDWICH

Here's a real he-man sandwich made from sliced hot turkey and heated stuffing and gravy.

On slice of bread (or toast) place about 1 cup of hot well-seasoned stuffing. Over the top lay slices of white and dark turkey. Then pour on about 1 cup of hot turkey giblet gravy. Serve with hot mashed potatoes, if desired. Cranberry sauce, of course.

OUR CITY COUSIN

Why does City get the store?

He thought they said,

"That's our new mayor!"

November 15, 1950

Best by "Gain-Test"

What does Chicago say?

You have probably heard that question many times. I know I have—livestock commission men, teachers of livestock marketing, producers asking, "What does Chicago say?"

What do they mean by that?

Well, as you know, Swift & Company has meat packing plants in many places. Each of those local plants supplies meat to the customers in its own territory. But when the producers in the area surrounding one of our plants are marketing more livestock than our people know can be sold locally as meat, then our plant asks Chicago for help in distributing that surplus.

To find markets for that surplus meat, Swift keeps track of the demand for meat on a nation-wide basis. Information similar to ours, from government sources, is available to everyone. From it we estimate what meat will bring in consuming centers where little or no livestock is produced. Then our Chicago office advises the local Swift plant-with-the-surplus accordingly.

With this information at hand our local livestock buyers go into the market to buy cattle, calves, lambs and hogs. The livestock which our plants buy, with the help of Chicago's advice, they convert into meat and ship to the big consuming centers.

In short, the only time "Chicago says" anything is when a local plant needs help in distributing a surplus supply of meat. Seldom if ever do they do as many as a dozen out of our fifty plants need this help from Chicago at one time.

This distributing of surplus meats (from areas that produce more than they can consume locally) is of great value to producers and consumers. To producers, because their local livestock prices are thus determined on a basis of nation-wide demand, rather than on an over-supplied condition in their own local community. And to consumers, because it provides adequate supplies of meat to people living in those areas which do not produce enough livestock for their own needs.

Soda Bill Sez:

When a feller makes a mistake and doesn't admit it, he's made two mistakes. And if he doesn't fix it up, he's made three!

The Role of Grass in Beef Production

by A. J. Dyer
University of Missouri
Columbia, Mo.

Grass puts stability into the cattle business. Thirty years ago, cattle feeders were corn-minded. Feeder cattle were almost immediately started on grain feed after purchase. Now, wide use of pasture and roughage enables the cattle feeder to make some profit from cattle fattening even if cattle prices drop some between purchase time and date of sale. If income is to be maintained, roughage and pasture must be converted into meat. Beef cattle can do it.

At the Missouri Station, choice 400-pound feeder calves have been developed to 1200-pound fat 2-year-olds grading good in the carcass with about 10 bushels of corn. Sixty percent of the entire gain was made from pasture and 30% from roughage, 10% from grain feeding. Fat 1050-pound yearlings have been produced from 400-pound feeder calves with about 25 bushels of corn. About 40% of the total gain was made from pasture, 30% from roughage, and 30% from grain feeding in dry lot. Feeding some grain is essential in order to market the pasture gains to advantage.

New and old pasture crops and more know-how about utilizing them, increased use of plant foods, development of cattle that put on flesh readily have all contributed to the increased use of roughage and pasture.

Swift & Company
UNION STOCK YARDS, CHICAGO 9, ILL.

Nutrition is our business—and yours
THE LAND BANK is a co-operative organized to serve its owner-borrowers at cost. Interest rates are minimum and are fixed for the life of the loan. Payments are planned for the borrower’s convenience and are geared to the normal capacity of the ranch.

**THE FEDERAL LAND BANK of Berkeley**

Serving California, Nevada, Utah and Arizona

Loans made through National Farm Loan Associations

There's an association near you — look in your telephone book

WHEN YOU THINK OF CULTIVATION
THINK OF HAYMAN’S DEPENDABLE IMPLEMENTS
AND SEE YOUR B. HAYMAN DEALER

B. HAYMAN CO. INC.
Since 1876
3301 Leonis Blvd., Los Angeles 54, Cal.
Telephone: Kimball 2288

SALE TOPPER—Shown above with his new owner, W. W. Thorp of Britton, S. D., is Baca OJR Royal 1, top-selling animal in the Swisser & Field Hereford dispersion held in Gunnison, Colo., last September. Mr. Thorp paid $46,000 for the great sire.

the firm side with top prices at the best levels of the season.

Firm prices for finished cattle on the Pacific Coast were due primarily to a lack of numbers. At no market point was there more than a very slim supply during the last 30 days and this lent great support to the market for high medium and better grade offerings. Toward the close of October better grade steers and yearlings—that is anything up from high medium—sold at $28 and better with a few cattle making a top of $32 at Los Angeles.

These better grades are on the firm side compared with a month earlier, but middle kinds, which includes grassers and warmed up stock, are weaker and sell mostly from $25 to $27.50 with Los Angeles prices generally a little higher than market points to Spokane on the north. Plain and common grades of steer cattle sold in a wide range, but generally from $22 to $24.

Heifer numbers were light at all times. A few good grading offerings hit a high of $30, but the bulk of heifers at all markets landed at $24 to $28 with common kinds as low as $20 at some points. Cows have held up well in spite of the fact that they comprised the largest part of receipts at many points. Good fat offerings were bringing $33 to $34 with the bulk at $30 and above. Canners and cutters figured at $16 to $19 late in October with shelly canners at $15 and under.

Feeders Active. Bull prices fluctuated quite a bit and bolognas were selling late in October at $27 and down. Calves and vealers met good support with feeder buyers taking kinds that were not too fat. Top vealers hit $34, while most sales were at $33 and down.
"More Weight... More Milk... More Profits... When you Control Cattle Grubs NOW with ROTOCIDE 500!"

Now is the time to start taking cattle grub control measures—and now is the time to invest in the surest, most proven cattle grub spray... ROTOCIDE 500!

Rotocide 500, containing 5% pure rotenone, should be applied at the first sign of grubs, at a dilution rate of 7 1/2 pounds per 100 gallons of water. A spray tank with a good agitator should be used, and the spray applied at 350 to 400 pounds pressure to the affected areas. Application should be repeated at 30 day intervals.

Rotocide 500 is also effective as a cattle lice and sheep tick control.

- GET ROTOCIDE 500...NOW AT YOUR DEALERS!

Many ranchers and dairymen prefer the old reliable DEROCIDE SULPHUR 2.40 for cattle grub control.
**LIVESTOCK PARADE**—This busy sale ring scene was taken during the selling of 4-H and FFA fat steers at the 1950 Pacific International Livestock Exposition, held last month at Portland, Ore. Around 900 head of beef breeding cattle and several hundred junior division fat steers comprised some of the largest classes ever on display on the Pacific Coast. Record crowds turned out for the well-balded show.

Light calves to feeders sold at $33.50. Stocker and feeder buying was never slow and prices toward Nov. 1 were highest of the season. Good yearlings sold at market points at $30 and under with calves at $34. Medium to good yearlings bulked from $25 to $28 with plainer stock cattle down to $20. Thin cows moved out at $19 to $21.50. Rain in the northern area late in October promised to further stimulate the demand for thin cattle.

The action of the cattle market in all sections of the country will bear watching if the weather should suddenly turn. Feedlots are dry in both the Midwest and on the West Coast.

**Hogs Fluctuate.** Hog prices were at a low point early in October, regained some ground later and then eased again toward the end of the month. The fall run is under way in earnest now, but the market has had good support and to date has shown less decline percentage-wise than is usually seen at this time of year. Butcher hogs weighing 190 to 250 lb. were selling in a narrow range and generally from $21.50 to $22.50 toward the end of October. Only a few big weight hogs were going down to $20 and most sows sold at $17 and better.

**LAMBS HOLD FIRM.** The range lamb run is now about over. The supply this year was smaller and in keeping with the extremely low number of sheep and lambs on farms. Prices are firm compared with a month earlier with an especially good tone to feeder stock. Killer lambs at Coastal markets generally sold at $28 and under with feeder lambs selling on a par with fat stock. At Ogden and Denver it wasn’t unusual for top fat lambs to be selling at $28.50 and feeder lambs at $29 and a little above.

Just completed—this modern, streamlined feed plant designed and installed by John W. Williamson & Sons for the Holly Sugar Corp. at Brawley, California, for many years a big user of Williamson equipment.

**PUSH-BUTTON FEED PLANT**
**Soon Pays For Itself!**

Just completed—this modern, stream-lined feed plant designed and installed by John W. Williamson & Sons for the Holly Sugar Corp. at Brawley, California, for many years a big user of Williamson equipment.

**CATTLE RANCHERS CUT COSTS—INCREASE PROFITS WITH A WILLIAMSON FEED PLANT!**

**Economical!**—Some ranchers report that plant pays for itself within a few years.

**Compact!**—Streamlined equipment forms its own building!

**Simple!**—Push-button controls and individual motors for each piece of equipment.

**Flexible!**—Williamson plants can feed from 50 head to 40,000 head of cattle or more.

**Long-Lasting!**—Rugged construction; some still operating after 30 years.
For
- SHIPPING FEVER
- METRITIS
- CALF DIPHTHERIA
- CALF SCOURS
- BACILLARY ENTERITIS
- FOOT ROT

Use **SULMET**

SULFAMETHAZINE

*The All-Purpose, Low-Cost, Time-Proved Sulfonamide Drug*

Available in Six Dosage Forms
for Fast Action Against Many Bacterial Diseases of Farm Animals

Many animals are back to normal feeding after one treatment—stunting and weight losses due to prolonged illness are avoided.

Get the advantages of once-a-day treatment—time and labor are saved, frequent handling of animals is unnecessary.

SULMET Sulfamethazine is available as: POWDER, TABLETS, OBLETS*, TINTED EMULSION (for pink eye bacterial infections), SOLUTION 12.5% (may be used as a drench) and INJECTABLE SOLUTION available by or on the prescription of a veterinarian.

Your veterinarian is your dependable ally in the constant war against disease. Consult him for the most effective management practices and disease-control procedures to meet your individual needs.

Free literature gladly sent upon request.


Clip this coupon and send to us at the address below for your FREE COPY of “COMMON DISEASES OF LIVESTOCK.”

Name ____________________________
Address ____________________________
Town ____________________________
County ____________________________
State ____________________________
My Dealer’s Name Is ____________________________

LEDERLE LABORATORIES DIVISION
AMERICAN Cyanamid COMPANY

30 Rockefeller Plaza New York 20, N. Y.
PLANT
BIRDSFOOT TREFOIL

Volkman recommends this proven legume in pasture plantings

A plant of Narrowleaf Trefoil showing the prostrate growth habit and the deep extensive root structure. This plant is only three months old but under favorable conditions, roots will reach a depth of 3 to 4 feet.

Many successful ranchers have planted Birdsfoot Trefoil and over the years it has proved most valuable for the following reasons—

Birdsfoot Trefoil is a high protein long lived leafy legume furnishing rich succulent forage over a long grazing season.

Birdsfoot Trefoil combines with other grasses and legumes to add variety.

Birdsfoot Trefoil reduces bloat hazard—there are no recorded cases of bloat even on a straight Birdsfoot Trefoil pasture.

Birdsfoot Trefoil produces weight gains comparable to Ladino Clover.

Birdsfoot Trefoil in dense stands or in close association with grasses makes excellent hay crops. It is equal to Alfalfa in protein. Being deep rooted, it requires less frequent irrigation than Ladino Clover. It withstands extended drought and is tolerant of some submergence, making it useful on irrigated, sub-irrigated, and dry land plantings.

Birdsfoot Trefoil fixes free nitrogen, contributing this essential element to the soil. Studies show that root nodules of the Trefoils have a higher nitrogen concentration than other legumes.

Experience in California definitely indicates that both varieties do best in neutral soils; the narrowleaf (prostrate) tolerating soils with a saline reaction, the broadleaf (upright) tolerant of acid soils.

Include this valuable legume in your pasture seeding this Fall.

Ask your dealer for VOLKMAN’S Birdsfoot Trefoil in either strain.

C. M. VOLKMAN & CO • Quality Seeds Since 1863 • 55 Union Street, San Francisco 11
THE FARM PROBLEM, which refuses to stay "solved," will be dumped into the lap of the new Congress when it convenes in January.

Complicating the problem is the fact that the farm organizations can't agree among themselves, or with the Agriculture Department, on what should be done.

What should be done about perishable foods? The department has some need to meet added demand and was deleted from the Defense Production Act's handling and carrying charges. An buildup reserve stockpiles. 

Production which Brannan says will be increased by the secretary is likely to do so unless ordered by Congress when it convenes in January.

During World War II a number of farm organizations can't agree among themselves, or with the Agriculture Department, on what should be done. What about supports for livestock? Hog raisers in particular have been asking what assurance they will have against a price collapse if production exceeds demand. The secretary, under the present law, is permitted but not required to support hog prices.

At what price should the secretary be permitted to sell farm commodities purchased for support purposes? The present law limits the government sale price at not less than 105% of the support price, plus "reasonable" handling and carrying charges. An administration attempt to cut the government sale price to the support price was deleted from the Defense Production Act because of farm organization opposition.

SOME OF THE farm groups are insisting that present support rates ranging up to 90% of parity are not high enough to bring out the increased production which Brannan says will be needed to meet added demand and build up reserve stockpiles.

During World War II a number of supports were set above parity in order...
Yes, with a Pomona Deep Well Turbine Pump and modern irrigating methods, you can vastly increase your acreage yields. You can control the amount of water your crops need for best growth. No longer will you be forced to depend on the weather.

The Pump is the heart of any irrigation system, and that's why the dependable Pomona is the choice of wise farmers everywhere. They know they can rely on Pomona for trouble-free service—for all the water they need at lowest pumping cost per gallon.

Check your pump requirements with your Fairbanks-Morse Pomona Pump Dealer. Fairbanks, Morse & Co., Chicago 5, Illinois.

Pasture grasses are only as good as the seed from which they grow, so plant the best. Germain's Premium Brand seeds are thoroughly recleaned and scientifically tested regularly to meet highest standards of germination, purity and freedom from weed seeds.

Send today for a free copy of Germain's Pasture Book. It's fully illustrated and contains complete information on pasture grass seeds, types of soil required, when to plant, moisture and climatic requirements and other invaluable data for the livestock producer and dairymen.

Also Distributors of Dale Butler's Pasture Grass Seed Mixtures

---

**Agriculture Department** officials have developed a farm program policy which they hope will avoid the necessity of OPA-type price controls both at producer and consumer levels. They think it has a good chance of working, if general inflation is avoided.

The policy is basically the old Henry Wallace Ever Normal Granary, with a new twist on the end. The Wallace theory was that of storing foods in years of abundance for use whenever production fell below demand. The intent was to level off the supply between

---
"Richest protein supplement you can buy..."

—a blend of 5 proteins reinforced with Urea—12 base and trace minerals—stepped-up amount of Vitamin D.

Moorman's

45% Range Mintrate Cubes

... can be fed alone or as a balancer with cake—a car of Moorman's will stretch any cattleman's cake supply.

... bite size—comes in 100 lb. easy-to-open "rip cord" bags—distinctive red color identifies the genuine Moorman's.

Ask your Moorman Man about the money-saving price advantage of buying protein-packed Range Mintrate Cubes by the car. Or write or wire Moorman Mfg. Co., Dept. HI-11, Quincy, Ill.
years of gluts and years of scarcity. Brannan thinks the Wallace idea can be used also to level off prices. He intends to throw the 1951 farm production throttle virtually wide open by removing production restrictions and asking farmers to produce all they can of storables commodities. These include 12,000,000 more acres of wheat, 10,000,000 more in cotton and 8,000,000 more in corn—an increase of nearly 10% in total tilled crop land. The government, under this proposal would establish a so-called “fair price” for each commodity. When the market went below that price the government would buy; when it went above, the government would sell. Farm objection to this is that it means price fixing by the government.

HAS THE foot-and-mouth disease been eradicated in Mexico? Officially, the Joint U.S.-Mexican Commission is making no claim that it has, but privately members say “It looks like we have it licked.” Evidence seems to support the private rather than the official view.

Sporadic outbreaks which were reported here last month now have been identified as stomatitis. Actually, there has been no positively identified outbreak of aftosa in Mexico since December, 1949. Vaccinations ceased last July. The 6,000-man eradication force has been cut to fewer than 3,000 inspectors who are constantly moving through the quarantine zone in search of the disease. This procedure will be continued at least until next summer.

Livestock disease scientists say they can’t be certain that the virus has died out until at least a year after the final vaccination. They want to keep the quarantine in effect and the border closed until at least late 1951. Pres-

Conversations with feeders of winning calves and car-lots at recent fairs, and with buyers of shipper calves for regular marketing have convinced me that the value of a well balanced calf starter is being recognized more and more widely... not only for starting young beef calves right from the cow, but also for starting, conditioning, and putting a bloom on feeder calves of 300 to 500 pounds.

Many feeders, especially of show calves or car-lots, continue to feed calf starter all the way through to market.

Pillsbury’s Best Calf Starter has this role in some leading cattlemen’s feeding programs, with exceptional results and surprising economy.

Or if you prefer...

Pillsbury’s Best Calf Ration serves the same important functions as Calf Starter, but is a complete feed in itself. We add selected crushed grains, quality molasses and other nutrients to the Calf Starter formula to produce Pillsbury’s Best Calf Ration, an appetizing, efficient, complete calf builder.

WE OFFER $25 for letters used in this column. Send me your ideas on management, feeding and breeding.

**Something for nothing**

It’s free! Get the informative booklet “CALVES... Raise Them Right... Save Milk. Feed and Labor” from your Pillsbury’s Best Feed dealer, or write to me.

GLOBE MILLS (Trade Name) 
PILLSBURY MILLS, INC., Los Angeles
WESTERN LIVESTOCK JOURNAL
Farmer we know in Sonoma County, California, figured out a way to clean up his orchard after pruning, and his system should save you an aching back, considerable time and a lot of labor costs. He attached an ordinary buck rake to the front of his International Diesel crawler tractor. By driving between the rows of trees, he was able to pick up all the pruning brush and dump it at the orchard edge, all ready for burning. The hydraulic controls on the tractor made it easy for him to lift the rake after the load had been gathered.

**HOW TO ADD LONGER LIFE TO FARM ENGINES**

There’s no doubt that added protection for the engine in your car or gasoline-powered farm equipment results in longer life for these machines. And there’s no doubt that Union’s Triton Motor Oil gives you that added protection. Fortifying compounds added to Triton’s pure paraffin base stock combat oxidation and neutralize engine acids far longer than ordinary oils. Triton continues to give you amazing engine protection long after 1,000 miles, the former oil drain interval. For that extra margin of safety for auto or farm equipment, ask your Union Oil Farm Representative about Triton.

**SIMPLE GATE LATCH SAVES TIME AND EFFORT**

In the past, cattlemen had to get off and on their horses many times to open pen gates while sorting cattle for branding or marketing. At Madera, California, cattlemen at a large ranch have developed a simple gate latch with a long handle that permits gate opening without dismounting. Speeds up cattle handling and saves a lot of effort.

**CHECK YOUR HEATING EQUIPMENT NOW**

Check your heating equipment now for the winter ahead. Be sure that each unit is properly installed and in good working condition. Then inspect your heating oil. Do you have an ample supply on hand? Is your heating oil free from moisture and foreign substances? You’ll get more heat from less fuel if you insist on uniform quality Union heating oils. Union Oil Company guarantees these heating oils absolute protection in refining and transporting to your farm. They get the same careful attention as premium gasoline. For soot-free, economical and dependable heating, ask your Union Farm Representative for Union heating oils.
There's no substitute for PROTEIN

On the range...for the family milk cow...for sheep or hogs...there's no substitute in rations that will take the place of plenty of quality protein.

COTTONSEED MEAL, PELLETS or CAKE are rich in good quality protein. That's why "CAKING" on the range and MEAL on the farm, are standard practices of ranchmen and farmers who demand economical concentrated feeds.

NOW AVAILABLE FROM SPOT STOCKS
LOW COST-HIGH VALUE PHOSPHOROUS
PLUS TWENTY-SIX TRACE MINERALS

KELL-PHOS
THE MINERAL INGREDIENT WITH PERFORMANCE
FOR FREE SAMPLE AND PAMPHLET, SEND COUPON TODAY

H. V. NOOTBAAR & CO.
890 S. ARROYO PARKWAY, PASADENA 2, CALIF.
* Please send me at once your informative pamphlet and sample of Kell-Phos without obligation to me.
NAME: ____________________________________________
ADDRESS: _________________________________________
CITY: ____________________ STATE: ____________

CORNBELT demand for stocker and feeder cattle, say USDA livestock experts, will keep prices high in relation to finished beef for the next several months. Prices for stockers and feeders recently have averaged $7 over a year ago.

A USDA survey reports that there are fewer feeder cattle on ranges than a year ago, and that fewer are yearlings or older. The survey showed that 26% fewer feeder cattle moved into Cornbelt states between July 1 and Oct. 1 this year than in the same months of last year.

With feed grains in at least as large supply and more hay than a year ago, demand for feeders is due to continue strong.

The number of cattle on feed in the three principal feeding states—Iowa, Nebraska and Illinois—on Oct. 1 was 1,084,000, an increase of 21% over a year earlier.

Cornbelt feeding has been to heavier weights than last year. On Oct. 1 146% of the cattle on feed in the three principal states weighed 1,100 lb. or more. A year earlier the percentage was 27%.

INDICATIONS are piling up that Secretary Brannan may be on his way out of the Cabinet, but probably not as soon as some of his farm organization and political enemies would like.

Only one thing seems certain—Brannan's job is less secure than it was after the 1948 election.

His failure to put across his farm subsidy program, after selling it to the President and the Democratic party but not to farmers, appears to have weakened his hold on the Cabinet post. Even close friends of the secretary concede that.

He has carried on a constant and bitter feud with the Farm Bureau, most powerful of the farm organizations, and the Grange and National Council of Farm Cooperatives have given him a cold shoulder. Only the Farmers Union has remained loyal.

He has failed to win support in Congress. Sen. Clinton Anderson, the former secretary, who was responsible for his getting the job, has turned against Brannan and would like someone else in that office.

We've learned that you have to fall back, and can fall back on the cattle when hail or crop failure hits," declare Mr. and Mrs. E. C. Griswold, Gem, Kan. They raise wheat and registered Polled Herefords. They had 500 acres of wheat hailed out last year. "It was quicker than fire," say the Griswolds. "Just 20 minutes and the wheat was gone, but we still had the cattle and they went right on working for us."
OCTOBER wasn't too much of a traveling month for me, but during the last week of September I had a chance to visit the Kern County Fair & Horse Show at Bakersfield, which is one of the California fairs that has developed probably as much interest in junior livestock exhibits as any in the West.

The agricultural program of the Kern County Union High School at Bakersfield attracted so much attention locally a number of years ago that Kern County authorities purchased a farm just outside the city and turned it over to the high school agricultural department. This farm, operated under the guidance of the department, has enabled the FFA agricultural students to carry on a program that has been of outstanding importance and remarkably successful.

The livestock that has been fed there by the students has been shown at many of the California fairs and stock shows, including the Cow Palace, California State Fair and the Great Western at Los Angeles. The results are too well known in livestock circles to need much comment. Of course, the Bakersfield fat stock junior show at the Kern County Fair is where the students really go to town, and this year's exhibits were remarkably good. The sale that is always held in connection with the show was probably the most satisfactory they have had.

I attended the sale and commented upon it in the weekly Journal, but there were a few things that especially attracted my attention that I didn't mention in that article. One is the effect this program has had in developing family interest in livestock projects, as well as unusual activity and progress in 4-H and FFA groups. In talking with Howard Dickson, head of the KCUHS agricultural department, he told me something of the history of the boys who this year won the championships on their steers, swine and lambs. I thought it was so interesting...
Next spring will be too late to wish you had sprayed for lice this fall. Spray now and prevent lice population build-up which will sap the vitality of your herd when they need it most. Save feed, too.

**SPRAY-DIP does the job Best!**

The SPRAY-DIP method of complete saturation is the sure way to control lice, as well as other cattle parasites. Hundreds of the finest breeders and feeders all over the world have proved that it pays big dividends. Write for free booklet showing in chart form just how many dollars the SPRAY-DIP program will put into your pocket. New 1951 Model now in production has many new features at a new low price.

**LIVESTOCK SPRAYER MFG. COMPANY**

771 Coleman St., San Jose, Calif.
4701 Lafayette St. (Stockyards) Denver, Colo.

*Ask for Free Demonstration*

---

**The IMPORTANCE of BETTER PASTURES is told in this book**

It tells of amazing pasture and livestock production with... **FREEDOM FROM BLOAT!**

It is FREE—Send for it TODAY!

*Contact us for name of our dealer nearest you***

---

**DALE BUTLER'S PASTURE MIXTURES, INC.**

Phone 1Ogen 1511 UNION STOCK YARDS DEPT. 1 LOS ANGELES 38, CALIFORNIA

**TALKING IT OVER—Ed Jameson, left, and Peter Bartmus, both cattlemen from Kingman, Ariz., talk over mutual problems at a recent livestock event in the Southwest.**

---

Glen Elcano, who showed the grand champion steer, a Hereford which was also 4-H champion and sold at $1.75 per lb., is a junior in the Bakersfield high school and is majoring in mathematics. He was born and raised on his folks' ranch, which is located south of Bakersfield. Glen's two older brothers, Fred and Isadore, who also live on the ranch, majored in agriculture during their high school years and were both good Future Farmers. Isadore was a particularly good stock boy, and showed the champion fat FFA steer, a Shorthorn, at the 1939 Bakersfield show. During this project, Isadore took advantage of a ditch on the ranch, which carries plenty of water and provides shade from the willows along its banks, by arranging his feeding corral so that his steers could have access to this water and shade on hot days. This proved to be a very good method of keeping down temperatures and increasing feed consumption during the summer.

This last year, Fred Elcano, the older brother, bought some Hereford steer calves from a Nevada firm through an auction sale. He saw the possibilities of one of these calves and gave it to his brother Glen for his 1950 project. Glen bought his alfalfa hay from his folks, who produce both cotton and alfalfa, and arranged an electric fan in his cattle barn during the hot summer days, which worked out well for him.

Of course, all of the Elcanos are good farmers, and Glen learned early in life to do a thorough job of feeding and caring for whatever animals he
As happens time after time, shipping fever struck down this calf, even though it was never shipped. Shipping fever (Hemorrhagic Septicemia) may strike whenever there is an upset in animal routine — and is not confined to the actual shipping period.

Upsets in routine such as weaning, radical feed and climatic changes, dehorning and branding, even excessive handling lower an animal’s resistance to disease — and can result in costly shipping fever losses.

Many cattlemen have learned from experience that it pays to protect their herds by vaccinating against shipping fever prior to any upsets in routine.

Guard against shipping fever losses with these field-proven Cutter “Blue Ribbon” Alhydrox* Vaccines:

**Hemseptol**® (**ALHYDROX**) — A formalin-killed hemorrhagic septicemia bacterin prepared from the organisms of the Pasteurella group and recommended for active immunity against shipping fever.

**Pelmenal**® (**ALHYDROX**) — A formalin-killed mixed bacterin prepared from the organisms of the Pasteurella group plus other organisms often associated in pulmonary type infections. Recommended in the prevention of hemorrhagic septicemia and associated pulmonary infections.

**Blacklegol “S-HS”**® (**ALHYDROX**) — Provides in a single 10 cc dose long-time immunity against (1) blackleg and (2) malignant edema, plus seasonal protection against (3) shipping fever. When cattle which are not known to be fully protected against blackleg and malignant edema need shipping fever protection, use Blacklegol "S-HS," and guard against all three diseases in a single shot.

Shipping Fever Vaccination should be completed not less than 10 days before expected upsets in routine lower resistance.

*Cutter Trade Name for Aluminum Hydroxide. Alhydrox as an adsorbing agent holds the vaccine in the tissues longer; releasing it slowly giving the effect of repeated small doses to build peak immunity.

FOR PREVENTION OF SHIPPING FEVER...

**CUTTER • Hemseptol - Pelmenal - Blacklegol "S-HS"**
Here's why...

NOW THERE'S OL' CHARLIE—PROBABLY WORTH TEN MILLION. HE WEARS THE BEST MONEY CAN BUY -- THAT'S WHY HE ALWAYS STICKS TO LEVI'S.

your best buy in overalls is

LEVI'S

the cowboys' favorite for 100 years

Levi's are still going strong long after other overalls are worn out. That's because Levi's are cut from a super-tough, premium denim—the world's heaviest—every yard of it woven exclusively for Levi's. And Levi's are reinforced at all strain points with real copper rivets—set by hand for greater strength!

Levi's fit better, too. Many have tried, but without success, to copy the slim, trim fit of Levi's, that keeps 'em from bagging or sagging, binding or bunching.

Ask your home town merchant for Levi's—the original cowboy overall. Look for the Red Tab on the back pocket. Remember, there are lots of blue jeans, but there's only one Levi's.

a new pair free if they rip!

*The name LEVI'S is registered in the U. S. Patent Office and denotes overalls made only by Levi Strauss & Co. Main Office: 98 Battery Street, San Francisco 6, California.

---

was handling. The grand champion steer this year evidently was a result of good family farm practice all the way along the line, which undoubtedly has been stimulated by the contacts the boys made through their 4-H and FFA years.

The grand champion barrow of this year's show, a Chester White, was fitted and shown by Frank Surber of the McFarland FFA chapter and sold for $2.10 per lb. The boys of the McFarland FFA chapter are specializing in producing purebred Chester White hogs in a program set up by Mitchell Nidever, agricultural teacher at McFarland high school, a KCUHS district unit, through contacts with the national Chester White association.

The herd that has been developed is being raised on the school farm at McFarland, the weaned pigs being available to Future Farmers for their project work. Frank Surber's success is a result of this program. Another of these Chester Whites was made grand champion barrow at the Delano Fall Festival & Livestock Show in October.

Harry Maddux of Cowelo 4-H Club was breeder and exhibitor of the grand champion lamb of this year's Kern County show, a Southdown which brought $7 per lb. Harry is the son of Glenn Maddux, a former Bakersfield High School Future Farmer.

Harry has been showing animals in his own name for several years. He had the grand champion lamb in 1948, which sold for $15 per lb., and the champion again in 1949, which went at $12 per lb. So this makes the third consecutive year this boy has had the grand champion lamb. This isn't an easy prize to win in Bakersfield be-

---

THE EASY WAY—Modern equipment makes for more work in less time on many Western ranches. The above photo shows suction unloading equipment for chopped hay, in use at the Palomar Angus Ranch, Pala, Calif.
$100 Calves

Those feeders and stockers represent too much money to take chances on Blackleg.

Even though each has a brand, that’s not a positive guarantee of adequate vaccination.

So it pays to make SURE by giving each animal a dose of FRANKLIN Clostridium Chauvei-Septicus Bacterin.

That means dependable immunity against both Blackleg and Malignant Edema.

Then to be doubly safe and protect against Shipping Fever, give also a shot of FRANKLIN Corynebacterium Pasteurella Bacterin. There's no more sure way of building up the needed resistance. These precautions cost but little but may save you much.

Franklin Offers the New and Better Treatment for Calf Pneumonia, Calf Diphtheria, Shipping Fever and Foot Rot

Now the livestock owner can give safe and effective treatment to his sick animals that have bacterial infections such as Calf Pneumonia, Calf Diphtheria, Shipping Fever and Foot Rot.

Franklin TRI-SULFA-SOL

is a scientific solution of three sulfonamides that overcome infection by preventing bacterial growth.

A single high initial dose is very often sufficient to produce quick and complete recovery. In other cases maintenance doses are required in keeping with instructions on the label.

Franklin TRI-SULFA-SOL provides a convenient, safe and economical means of utilizing the remarkable therapeutic values of sulfa medication.

Available at Franklin Drug Store Dealers in nearly all trading centers. Full information is set forth in the new free Franklin catalog and a special new leaflet.

O. M. FRANKLIN SERUM COMPANY

DENVER KANSAS CITY WICHITA AMARILLO FT WORTH MARFA EL PASO
ALLIANCE SALT LAKE CITY LOS ANGELES PORTLAND BILLINGS CALGARY
WRITE TODAY FOR COMPLETE CATALOG, AND NAME OF NEAREST DEALER.
cause, between the Future Farmers and the 4-H boys, there are probably more than 200 fat lambs exhibited.

DURING his FFA days, Glenn Maddux, Harry's father, made an outstanding high school record of having a champion steer, champion lamb and champion barrow. These championships were won at Bakersfield and the Great Western Livestock Show at Los Angeles.

Glenn's folks lived on a small farm southeast of Bakersfield and were alfalfa and cotton farmers. As a youth, Glenn learned how to care for livestock, and later, in high school, demonstrated that he could do a good job of feeding and showing. Of course, with a dad like Glenn, Harry has had the advantage of a lot of home instruction and has absorbed many good family farm practices.

Glenn Maddux now has a ranch which is establishing Rambouilletts in California, and he has had the distinction of having the grand champion animal at the California State Fair and the Inter-Mountain show at Salt Lake City. He also is raising a few Southdowns, and it is from this flock that Harry bred and fed his champion lamb this year.

ALONG the line of what I said in the beginning about the development of family interest, I would like to quote verbatim from a letter I received from Howard Dickson, giving

BUYERS—Leo (left) and Richard Hahn, owners of Prineville Land & Livestock Co., Prineville, Ore., and two of their purchases at the recent 1950 Pacific International. At left is Angustorra Bondoller 80, champion bull shown by A. L. Waugaman, Watsonville, Calif., sold to the Hahns for $1,500. The bull at right is Eileenmere Glen 2 of HR, reserve champion shown by Harold G. Rankin, Hermiston, Ore., bought by the Hahns for $1,100. The Hahn family has bred Angus cattle for 33 years. Photo by W.L.J.
me the details I have related above:

"To me it seems as if the 1950 grand champion animals in all three cases are results of careful planning and good livestock management. It just shows what a family or group of boys can do as they work toward a definite goal through a number of years. It is my belief that we will have a great many more families in California doing this same sort of thing as the number of farmers who have come through the Future Farmer and 4-H Club work increases, and the dads of the boys of 10 years from now can help in the instruction of the younger fellows."

In addition, Professor Dickson told me at the sale that the junior livestock exhibited at Bakersfield this year came from boys and girls from 128 Kern County families, with practically only one entry from each junior consignor.

Of course, everybody knows that Kern County is a wonderful agricultural section, has the advantage of having a group of agriculturally minded citizens and that the Kern County Union High School district includes schools at Bakersfield, East Bakersfield, Kernville, McFarland and Shafter, all of which have FFA chapters. There are many 4-H Clubs located in these same areas, all headed up by interested and capable leaders.

It seems to me that the success of the junior programs in these schools and clubs, which undoubtedly will reflect itself immeasurably on the lives of

He's off the ground a lot these days!

Meet a Pacific Telephone lineman. He and his fellow-workers are spending a lot of time in the air these days, stringing and splicing the telephone wires that are helping provide service to more and more Western farm families.

Last year we put up nearly 13,000 miles of wire and 36,000 poles in rural areas. It was our best postwar year to date. And you can be sure we'll keep right on getting service to more and more Western farms and ranches.

Pacific Telephone

ECONOMY "Special 20"

ECONOMY SPECIAL "20" has been developed to better fill the need of the mineral feeding practices of today. It's a properly balanced Mineral and Vitamin supplement, made especially to meet the requirements of the present time. Rich in Calcium and Phosphorous in the correct ratio and fortified with other essential Minerals and Vitamins in proper proportions to cover deficiencies.

James J. Doty Company

HEARST BUILDING  SAN FRANCISCO 3
HIGHEST GAINS PER DAY

Ship your feeders to the California Cotton Oil Yards—just a mile away from the Los Angeles market—where Larry Richens, the best feeder in the business, carefully selects and controls feed supplements that add the highest yields in daily pound gain.

Our topgrade facilities—clean yards, modern feed mills, and expert care—produce top grade profits for you.

PHONE NOW FOR SPACE RESERVATIONS—AN. 0189
Time to start a business is when you’re YOUNG and BROKE. You’ve got 80 failures comin’ and nothin’ to lose.

The business of getting water to your stock and house is going to cost you—no matter how it’s figured. Question is how much? Well, a Jensen Jack will do it for only about 7c a day.

And there’s a lot more to the story of getting water to your stock and house is going to cost you—no matter how it’s figured. Question is how much? Well, a Jensen Jack will do it for only about 7c a day.

JENSEN BROTHERS MFG. CO.
COFFEYVILLE, KANSAS, U.S.A.
Export Office, 50 Church Street
New York City

November 15, 1950

Pump Handle Pete
Gags:
Jensons Cut
Your water
costs.

Time to start a business is when you’re YOUNG and BROKE. You’ve got 80 failures comin’ and nothin’ to lose.

The business of getting water to your stock and house is going to cost you—no matter how it’s figured. Question is how much? Well, a Jensen Jack will do it for only about 7c a day.

And there’s a lot more to the story of letting Jensons cut your water costs. Write us a card or letter to Coffeyville, Kansas, for free Pump Jack literature. Do it now while you’re thinking about it!

JENSEN BROTHERS MFG. CO.
COFFEYVILLE, KANSAS, U.S.A.
Export Office, 50 Church Street
New York City
Treat yourself to a fall vacation where the soft trade winds blow!

Cruise to Hawaii on the S. S. Lurline!

Fall is a wonderful season for a Hawaiian cruise on the Lurline! You may live as gaily or quietly as you choose—swim, play deck games or simply relax in the sun! You’ll dine superbly, dance, meet new friends, enjoy Hawaiian hospitality all the way—at sea and in the Islands! Rates as low as $120 one way, plus tax. The Lurline sails on alternate trips from Los Angeles and San Francisco to Honolulu.

- Leave San Francisco Nov. 17
- Leave Los Angeles Nov. 29
- Leave San Francisco Dec. 11
- Leave Los Angeles* Dec. 22

* Special Lurline Christmas, New Year’s all-expense cruise.

See or call your local travel agent.

Matson Lines Offices:
San Francisco, Los Angeles, San Diego, Seattle, Portland

New Book Presents Practical Methods of Ranch Management

The economics and management of successful livestock ranching are discussed thoroughly by an expert in a book recently issued by the University of Minnesota Press, “Western Stock Ranching” by Mont H. Sanderson.

Sanderson, who has been a Western range economist with the U. S. Forest Service since 1938, has based much of his information on field surveys and management studies in which he has worked with stock operators, learning their problems and the methods they have found successful.

Sections included deal with resources, livestock management economics, grazing land use, feed crops, markets and prices, business management and the use of federal public lands. “Western Stock Ranching” may be obtained from the University of Minnesota Press, Minneapolis 14, Minn., for $5.

Commercial Fertilizers Boost Carrying Capacity

Commercial fertilizers provide the most economical and practical way for a rancher to increase his range carrying capacity, in view of the current high land prices.

Although rainfall limits forage production greatly, many ranges are too depleted in soil fertility to provide normal growth when moisture is available, according to California farm advisors. Field trials in Merced County, California, indicate that simple nitrogen or nitrogen and phosphorus fertilizers are best. Production increases of from 50 to 100% have been gained on fertilized areas over untreated acreage.
Killer Chemicals—
Scientists Continue Work
On Brush Control Compounds
By P. S. PATTENGALE
M. D. MILLER*

UNTIL about 1945 most of the work on chemical brush control had been limited to frilling or girdling and the subsequent use of toxic chemicals such as sodium chlorate and the arsenicals. While persistent efforts in the use of this method were usually successful, the work was expensive, laborious and time consuming.

With the development of 2, 4-D in 1944 interest and work was greatly stimulated in the possibility of controlling brush by chemical means. As yet, however, chemical control has not found its exact place in the over-all controlling brush by chemical means. As yet, however, chemical control has not found its exact place in the over-all controlling brush by chemical means. As yet, however, chemical control has not found its exact place in the over-all controlling brush by chemical means.

Ideally, a chemical brush control agent should be selective in action, cheap, easy to apply, a sure killer and non-toxic to livestock, wildlife and man.

Today a number of chemical agents exist which perform with varying degrees of efficiency as brush killers. As dusts or sprays, they are used singly and in various combinations. Chief among these are diesel oil, ammonium sulfamate, sodium chlorate, zinc chloride, the di-nitro compounds and hormone-type formulations. The hormone compounds show considerable promise, if used properly as killers of certain species of brush. Of these compounds, 2, 4-D and 2, 4, 5-T are attracting the most attention.

Data Needed. Listing of the relative susceptibility of different brush species to the newer organic herbicides cannot be done until more data are accumulated. Additional information is needed on the proper time of application, as well as on chemical concentrations and appropriate carriers required. The economics of any chemical control program revolve around the total amount and unit cost of needed chemicals, the cost of application and relative value of the land once the brush has been killed and disposed of.

Here are some of the trends that have been noted in work with chemical brush control:

There has been some indication that heavily browsed sprouting plants and seedlings appear more susceptible than unbrowsed plants.

Uses Listed. Because of the cost per acre for materials, the chemical killing of brush may find only specialized use, that is:

1. To kill brush to prepare for fire-guards which may be burned at a

Buy FerrY-Morse Irrigated Pasture Mixtures for Your Every Need

Ferry-Morse Irrigated Pasture Mixtures offer you definite advantages. They produce more feed for less—provide a longer growing season—reduce the chances of bloat—offer a better balanced diet and more complete utilization of available plant food in the soil—can be used with various soil types and unusual soil conditions.

From many years of experience, Ferry-Morse has developed a number of Irrigated Pasture Mixtures which specifically provide formulas for Alkali Soils, Beef Cattle, Dairy Cattle, Hogs, Horses and Sheep. All mixtures available in 50 lb. bags.

Buy Ferry-Morse Irrigated Pasture Mixtures from your local dealer for better pastures and a more profitable operation.

FERRY-MORSE SEED CO.
SAN FRANCISCO 24 • LOS ANGELES 1
DETROIT 31 • MEMPHIS 1 • HARLINGEN

Our Background of Established Quality Is Your Best Insurance for The Future

CHECK THE PROFIT ANGLE

Healthy animal growth and reproduction essential to profit are impossible without the right calcium-phosphorus. That's why feed formulas should always include Spent Bone Black—the heat-sterilized, Bone mineral feed with nature's calcium-phosphorus ratio, 100% pure... never rancid... completely acceptable to livestock.

SPENT BONE BLACK
Guaranteed 30% Calcium • 15% Phosphorus

A. M. BLUMER
465 California Street • San Francisco 4

BROWER Whirlwind FEED MIXER
Easy to use. 5 sizes... mixes 700 to 4000 lb. batches in 10 minutes. All steel, last for years. Over 6000 in use. Write for catalog TODAY!

BROWN AND COMPANY
WESTERN DISTRIBUTORS—(13) Eighth Avenue
Oakland 6, California, Templebar 4-8793
RAIN BIRD Sprinklers...give you
PLENITY OF WATER when
and where you NEED IT!

Stop erosion, save water and labor with Rain Bird Sprinklers. Their even distribution of water and faultless operation assure increased production at lower costs on row crops, pasture, orchard or garden.

*There's a Rain Bird Sprinkler specially designed for your irrigation problem. Write today for complete details.

RAIN BIRD Sprinkler Mfg. Co.
GLENDORA, CALIFORNIA

WHEN YOU GO TO TOWN

Take home some rolls of SISALKRAFT for many farm uses

Your lumber dealer has the right sizes for TEMPORARY SILOS for CORN AND GRASS SILAGE and HAYSTACK COVERS

You can use tough, water-proof SISALKRAFT for many protective purposes on your farm. Saves you money!

Over 20 years of successful farm service

Mail Coupon for FREE SAMPLES
The SISALKRAFT Co., Dept. W.I.J.-11
205 W. Wacker Drive, Chicago 6, Ill.
Please send free samples and instructions on Sisalkraft Silos and other uses.

Name
Town
RED No.
State

The SISALKRAFT Co.
Chicago 6 - New York 17 - San Francisco 5

WINNER — Charles (left) and Herbert Chandler of Baker, Ore., lead Miss Royal Dhu by RS Royal Dhu back to her stall just after she was named champion Hereford female of the 1950 Pacific International. Held last month at Portland. Photo by Wld

less hazardous part of the year. (To date, however, this has not been demonstrated.)

2. To prepare brush fields for burning during the less hazardous part of the year. (This has not been demonstrated on a commercial scale.)

3. To control brush where fire or mechanical tools cannot be used.

4. To spray brush regrowth areas after burns.

5. To check encroaching brush on lands which are just beginning to develop a brush problem.

Dusts of 2, 4-D have not proved fully effective in controlling even known susceptible species. Best results have been obtained where the active agents have been applied in water or oil solutions or emulsions thereof.

Apply in Spring. The 2, 4, 5-T formulations are proving more effective against brushy species than 2, 4-D formulations. A combination of 2, 4-D and 2, 4, 5-T may have some advantages.

Experience to date shows the desirability of applying chemicals for control when the plants are in a vigorous growing condition, which generally is in the springtime. May and June applications to mature brush have proved much more effective than treatments made during the non-growing period.

In the case of somewhat resistant species it may be necessary to respray the year following the first application to achieve full control.

*This summary of the authors' findings on chemical control of brush is taken from "What We Know About Brushland Management in California," a publication assembled by Milton D. Miller of the University of California Agricultural Extension Service. The authors are associate agriculturalists with the service.

My wife tells me I'm an old kill joy. About the time she starts planning for Christmas I begin to worry about shipping fever. Do you?

If you're worrying, then I've flopped in my job as your advisor on animal health problems. For three years now I've been talking (maybe some of you call it preaching) that prevention is the easiest and cheapest way to protect animals against shipping fever.

One of my oldest friends cornered me when I dropped in at his ranch the other day and sort of sheepishly admitted he didn't like the way some of his critters were running at the nose and lagging behind the herd. "Oh no, not you," I groaned.

Not until I'd been a little ornery and made him admit that he'd make a mistake in trying to "get by" would I go out and take a look at his herd.

It was shipping fever alright and we went right to work. We separated the visibly sick animals from the rest of the herd — gave 'em a shot of penicillin (Cutter's Penicil 1, naturally) along with a shot of shipping fever serum.

Then we went back to the ones that looked okay and started the prevention program that should have been started 80 days earlier with Cutter Penical 1. At the late date even this wasn't as good as it should have been, because it takes 10 days for the best shipping fever vaccine to take hold.

Later I didn't have to point out to my friend that all the treatment and nursemaiding involved, even though he was lucky and didn't lose an animal, added up to many times the cost of seasonal vaccination with Penical 1.

Got any mastitis troubles in milk cows around the place? Cutter is bringing out this month Petrocil 1, "S", a new fluid ointment combination of penicillin and streptomycin in a handy tube containing a dose for one quarter. The tube has its own applicator nozzle (no syringes needed). Petrocil 1, "S", in the handy "Tube-ricator", looks like a honey to me.

Happy Thanksgiving

See you next month.

C.L.
You've got a date in Los Angeles!

Wed., Dec. 6 (starting at 9 a.m.)
L. A. Union Stock Yards Sales Pavilion

Take your pick from a fine offering of Horned and Polled Registered Herefords, and many carloads of feeder cattle at the

"GREAT WESTERN"
Registered Hereford and Feeder Sales

MORE THAN 500 FEEDERS
Top quality HERD BULLS
Individuals, Pens of RANGE BULLS
Bred and open HEIFERS
Also Young COWS, some with calves

Judging Sale
Entries DEC. 5
by Alex McDonald

CHAS. ADAMS
HOWARD BROWN
Auctioneers

Arrange to be in Los Angeles for the show and sale of these cattle . . . then on to Santa Barbara for the California Cattlemen's Assn. annual convention next day.

Most of the sale cattle are in good, thrifty condition, but are not fitted "show cattle."

For your sale catalog, write:

RAYMOND HUSTED, Sale Manager
4511 Produce Plaza, Los Angeles 58, Calif.

GREAT WESTERN LIVESTOCK SALES COMMITTEE
The tractor tire you want is the one that will do the best job in the soil conditions on your farm. If it's an Open Center Tire you need, Firestone has it. If it's a Traction Center, Firestone has that, too. Firestone — and only Firestone — builds both tires.

The new and advanced Firestone Curved Bar Open Center is the only tire made with Traction-Arc Bars, tapered and curved for a sure, sharper bite and a strong, firm hold in the soil. Its flared tread openings between the bars insure positive, automatic cleaning.

If you are like a million other farmers who prefer a Traction Center Tire, then the patented Firestone Champion Traction Center is the tire for you. It's the only Traction Center Tire on the market, and more than two million of them are in use today.

And just keep in mind that you don't need to shop around. Your Firestone Dealer or Firestone Store has both the Curved Bar Open Center Champion and the patented Traction Center Champion. Either of these tires will do a great job for you because both of them are Champions in performance as well as name.

Always buy tractor tires built by FIRESTONE, originator of the first practical pneumatic tractor tire

Listen to the Voice of Firestone on radio or television every Monday evening over NBC.
The Western Sheep Industry

EARLY one-quarter of the nation's lambs and most of the spring lambs marketed—as well as 23% of the total national wool clip—are produced by an essentially pastoral industry in the seven Western states that comprise the 12th Federal Reserve District. It is an industry that must now be viewed in the light of international politics and a world situation which could affect lamb and wool production.

The structure of this Western sheep business is mainly one of range operations that began with the exploitation of natural grass resources after 1800, for despite the use of farm flocks as a means of agricultural diversification, the character of the industry remains unchanged.

From the time the original Spanish flocks of fine-wool Merinos were introduced by way of Mexico through the missionaries into California and Arizona, the sheep industry has been of importance to the West. In its beginning, Western sheep production was based on the sale of wool, but as population expanded after 1900, the demand for meat increased and the sale of lamb and mutton began to contribute the larger share of income derived from sheep raising.

Mutton breeds gained in popularity and cross-breeds were developed to produce desirable meat carcasses and retain the wool characteristics.

Range Control. With the regulation of the free range through the formation of the USDA Forest Service in 1905 and the Grazing Service of the Department of the Interior in 1914, patterns of operation were stabilized through range control. The days of the free open range were ended—and so was competition for grass which had resulted in overstocking and forage depletion. Gone, too, were the wars between sheep and cattle interests.

Between a quarter and a third of all Western range lambs, depending on forage characteristics and seasonal pasture conditions, each year do not attain sufficient flesh to be marketed for slaughter without additional feeding. On this fact rests the basis of the lamb feeding industry.

The production ranges of the 12th district supply many thousands of feeder lambs, with California, Idaho, Utah and Washington being the chief lamb feeding states of the district and California markets the chief outlets for lambs fed through the late fall and winter seasons. Commercial lamb feeding has been a significant factor in the marketing of district-grown hay and grains, as well as in the expanding supplies of agricultural by-products.

Federal Lands. In all district states, federal rural lands constitute a large portion of the grazing area. This has had a direct influence on management practices and methods of operation. More than 61% of the rural lands in federal ownership are located in the 12th district and of the total district land area 64% is in federal rural holdings. Nearly 70% of all public land incorporated into grazing districts is found within the states of the 12th district, as well as half of all national forest lands, many of which are open to grazing some months of the year.

During 1948 approximately 19% of the total sheep months in the 12th district were spent pasturing on grazing district lands and another 6.5% in the national forests.

Records of stock sheep numbers on farms and ranches are available for as early as 1847. Since then numbers have fluctuated (at approximately 8- to 12-year intervals) between a high of 51 million head in 1884 to a low of 27 million on Jan. 1, 1950. Beginning in 1924, the trend was upward and numbers were built up to more than 49 million head on Jan. 1, 1942.

Numbers Decline. In the 12th district, the upward swing in stock sheep numbers, which occurred in the late '20s, reached its peak in 1931. A gradual decline during the next decade, succeeded by a more rapid and continuing decline beginning in 1942, shows that 12th district stock sheep dropped 46%, or 5.6 million head between 1942 and 1950.

Some of the factors responsible for the decline have been more pronounced in the 12th district than in the country as a whole. Although wool prices were pegged in 1942 under price controls at higher levels than the yearly average which growers had received in two decades, prices of competing farm commodities proved more attractive in many instances.

Sheep growers were uncertain of the long-term outlook for continued price support on wool and apprehensive of government interest in a continuing low tariff policy. Production factors, too, were influential in cutting down the number of sheep in the district. Competent herders have been scarce. And production costs have risen sharply and relatively more than in some fields of agriculture, helping to account for the nation's lowest stock-sheep numbers in 83 years.

Role in Agriculture. The sheep industry plays an integral part in the agriculture of the 12th district as a market for feed crops and farm by-products, and

*Information for this article was taken from material prepared for the Federal Reserve Bank of San Francisco by Justinian Catre, agricultural economist, under the direction of research department officers.

Please Turn to Page 78
Enthusiastic Tulare County ranchers examine heavy stands of rye grass seeded in heavy ash after controlled brush burning.

By HENRY J. BECKMAN

If this doesn’t convince a man of the value of burning and reseeding, it’s because he doesn’t want to be convinced.” Claude Paregien, an enthusiastic pioneer of reclamation through brush burning and reseeding, was talking as we stood on a gentle slope just off the highway that leads up through the Eshom Valley in California’s Tulare County. It was one of those early summer mornings which only such mountain areas enjoy.

Around us was a rich green growth of rye grass, thickly stooled and reaching up to one’s hips, a grass which, along with others, gives promise of opening new empires of feed production. Across a ravine lay hillsides—some rugged, some gently sloping—now brush covered, but bearing feed production possibilities which only men of insight can visualize.

No man with a vision of the future can look at the remarkable results achieved by a few men in a few brief years in reclaiming brush lands without a thrill of exultation. Ten million acres of brush-covered land in California, much of it now of minimum grazing value, fling out the challenge.

Pioneer Field. Not all of it can be redeemed profitably. There are, however, great areas of California hill land where reasonably inexpensive reclamation can be carried out with satisfactory results within a reasonably short time. The experience of those men who are already in the fight plainly reveals this fact. By courage, insight and effort, they are succeeding in what remains, to a large extent, a pioneer field.

The obstacles these men must overcome are not all physical factors. In many burning programs a broad plan of cooperation is necessary. The human element in such a project is an important factor. In some cases a single reticent or indifferent land owner within a specified district may retard or even defeat an area project. There are legal angles to brush burning which need to be considered and seasonal, climatic and atmospheric conditions to be reckoned with. The nature of the terrain and the amount of grass covering are definite factors in the success of a burn. All these angles present problems. They

New Acres for the West

agricultural history is in the making as cattlemen blaze new trails on frontiers of production
Barbecue specialist Frank Olea of Prescott was a busy man the day before the recent 18th Yavapai County calf sale in Arizona—he prepared 1,300 lb. of beef for some 2,000 people who crowded into chow lines and around the show and sale ring at the Bar Muleshoe Bar Ranch of Hays and Zwang, Peeples Valley.

Judge Art Beloat of Buckeye and Tex Condon of Los Angeles, who flies over to sell the calves each year, rang up another success for the Yavapai event.

Some of the crowd, like the 4-H contingent from Yuma, came early and stayed late.

Yuma 4-H’ers, below, were the first to arrive, last to leave.

More than 2,000 sale enthusiasts went through the chow lines.

Serving barbecued meat were, left to right, Jesse Goddard, Warren Cordes and Arthur Evans of the Yavapai Cattlemen’s Assn.

J. M. Cochran of Camp Verde unloads two calves for the sale.

Of 67 head in sale, below, 64 Herefords sold to Frank Kenly, Glendale, at $182 each.
The livestock business from the breeder through the feeder, the wholesaler and on to the housewife was reviewed and the latest developments presented to visitors attending the annual Beef Cattle Type Conference and Feeders’ Day at Washington State College, Pullman, last month. The two-day conference is held annually to bring cattlemen up to date on research findings and projects that WSC animal husbandry scientists have been working on.

Emphasis was laid on the ultimate purpose of the livestock industry—to produce good meat for American consumers.

Bill Johnson of Armour and Co., Spokane, Wash., said that cattlemen who stressed weight were probably wasting their time, since the modern housewife refuses to buy fat cuts of meat. Housewives are now looking for better grades of meat and meat that is tender and flavorful. Small-size cuts are also much more popular than in grandma’s day, since the average size of a family has decreased considerably, Johnson said.

“The modern housewife knows beef better than her mother did, and she knows how to prepare it,” he said. “She’s very conscious of excess fat—she’ll pass it up or ask the butcher to trim it off.”

Red Meat. “Breed red meat into your cattle,” C. W. Hickman, University of Idaho, emphasized. “That’s what today’s meat consumer is looking for,” Hickman said. It was the cattle breeder’s responsibility to provide quality bulls—bulls that will give commercial feeders the kind of animals that will produce the right kind of meat.

In outlining “Steps to Success in the Cattle Business,” L. P. McCann of the American Hereford Assn. advised ranchers to check the pedigree several generations back when selecting a herd sire. “Try to find out if his bloodlines will mix with your cows,” he said.

“And don’t be so proud of your bull,” McCann continued. “Visitors would like to see his calves, rather than spend all their time looking at a high-priced sire.”
Bells of Eldorado

ELDORADO has a rich Spanish sound which is fitting and appropriate to California. This golden county, the champion of the Mother Lode country, teems with history, tradition and color. It was on the banks of the sandy, rushing American River that John Sutter's man John Marshall picked up pebbles of gold, a discovery that stampeded people from all walks of life to the state that lies on the shores of the blue Pacific.

Miners with their picks, pans and shovels put California on the map. Many of these immigrants, eager and restless in search of the yellow dirt, found on arriving in California that there were other types of gold besides that found by Marshall. Among these were grass and cattle for which some of the miners gave up mucking.

In this area, which includes Eldorado, Placer, Amador and other counties, some cattle ranches have been in operation for more than 100 years. The Bacchi Ranch is one of these. A visit to this ranch recently gave the writer the pleasure of meeting Francis Bacchi, who is now ramroding the outfit that his grandfather started years ago.

Alert Cowman. His ranch is typical of many in that area, and it was a pleasure to find this wide-awake beef producer up to date on many of the new methods connected with managing cattle ranches and improving range conditions.

The Bacchis run several hundred head of good quality whitefaced cows, pasturing them in the foothills in the winter and trailing them to the high mountains for summer grazing in the area known as the Georgetown, Ice House and Rubicon River districts. This high range is located approximately 35 to 40 miles from the home ranch.

The drive to the mountain range is probably the last of what might be called the “long trail drives” in California. This summer range produces excellent feed but is very rough and rugged.

Cow Bells. One of the practices followed by the cowmen in that area which is unusual to most areas of the West is the use of large numbers of cow bells on their

By REUBEN ALBAUGH
Extension Specialist in Animal Husbandry
University of California

Please Turn to Page 53
ANOTHER damn rhino has wrecked my pipe-line," Doug­las Hinde was saying as I arrived at his ranch. Rhinoceri and other wild animals are only part of the problems facing a cattle rancher in Kenya Colony, British East Africa, today.

The Hinde ranch includes 50,000 acres of country that looks like a less wooded and mountainous version of the land around Truckee, Calif. Although it is 8,000 feet above sea level, it is not more than 10 miles from the equator. As a result, the nights are quite cold while during the day the sun is strong and hot.

Startling contrasts in terrain can be seen from the ranch: Mt. Kenya juts its snow-capped and jagged peak into the sky 20 miles away, while on the ranch itself is a strangely prehistoric valley under whose thorn and fever trees live the giraffe, rhino, zebra and great numbers of buck.

Line Fencing. Hinde is only now completing his line fence, although he has had his land for 20 years! Actually, fenced fields aren't necessary for the cattle because they are kept and moved in herds by natives on foot. These "mobs" consist generally of about 150 cattle, and are constantly watched by two spear-carrying native boys (one to watch the herd, and one to feed the watcher!).

The spears aren't just decoration; they are often used. Leopards are always attacking the calves at night, and within one month Hinde has lost three cows to hyenas. The hyenas do not attack the cows to kill; the miserable animals simply leave them after tearing their udders off!

Fortunately, the lions have moved off into the frontier country, where there is one continuous native reserve and practically no white settlement. Hinde wishes, however, that a few of the lions would come back because they kept the buffalo and zebra down. The zebra roam over the ranch in tremendous herds, eating as much feed and drinking as much water as the average horse. About 500 of them are shot a year on the ranch as pests. The buffalo (much larger than our bison and often weighing a ton) are apt to charge anything, especially a man on horseback. Besides being the most dangerous animal in the area, the buffalo carry and spread Rinderpest. Their only asset is that their skins (hard as wood and three inches thick) are used to mix cement in!

By EDITH GRANT MAGEE*

Best Cattle. The type of cattle most disease-resistant and that does best on the feed in East Africa is the native Boran (almost identical to the Zebu). The Boran, although originally a Brahman animal from India, has become over the generations larger and less humped.

Whereas previously only the natives ran Borans and the whites stuck to raising various breeds of imported European cattle, Hinde has crossed the two. Although his experimentation is still in its early stages, the progeny of native cows and Red Poll, Guernsey, Shorthorn and Ayrshire bulls have been very successful. Besides being good feeders and fairly disease-resistant, all of the second generation have a whole bottle of quinine in one gulp!"
No portrait of genial, hard-hitting Robert L. Rutter, Jr., president of the Washington State Cattlemen's Assn., could be delineated without first mentioning his twin loves of Aberdeen Angus cattle and soil conservation.

This Ellensburg stockman is no Johnny-come-lately cattleman. In his more than 17 years of experience with Angus he has kept his herd to a size he could feed well and maintained his land in good shape. And he has always raised his cattle on irrigated pastures.

He has served in the state legislature, has been active in cattlemen's affairs, first as a director and later as president of the state association, and is supervisor of the Kittitas Soil Conservation District.

His work with farmers of the Kittitas Valley has resulted in increased yields from their lands and in adding valuable pounds to their beef cattle.

Rutter practices what he preaches. His pasture was classified by Soil Conservation Service technicians and planted and fertilized according to their recommendations. Even his irrigation system was laid out by SCS men.

Here is how he describes one of the goals of the conservation districts:

"I think many of us who are in the cattle business need to devote the same attention to our land and the plants that produce our feed as we do in caring for our livestock. We're all in the business of making pounds of meat at the lowest cost. I'm positive that by using our lands to their highest capability, and by understanding the growth habits of the plants in our pastures and on the ranges, we can really increase western beef production a great deal and at the same time heal up some of the erosion scars that have begun to mar our country."

And Rutter had his say about making beef profits when he wrote recently: "I don't think it adds anything to the value of the Angus or any other breed to run them on poor range just to prove they can take it. Abusing cattle under the claim they can rustle their feed among the sagebrush and rattlesnakes simply isn't profitable. It may be all right for folks who like to measure their success solely by the size of their herd, but most of us like to remember that it's the pounds of beef that we make that really counts."
4-H Club members parade before a full house at the 1950 Pacific International, held last month at Portland, Ore. Quality Herefords, Shorthorns and Angus were featured.

Shorthorn Breeders Earl Harper, Johnson, Wash., and John Mathieson, Bonners Ferry, Idaho, enjoy their talk with W. E. Williams, right, Pacific International president.

Staley Hereford Ranch of Pullman, Wash., headed the best 10 head class at PI above.

Three steers made news for Double M Herefords, Adams, Ore., at the show. Right: Their 1950 grand champion, a son of TT Onward 3d. Left: Brent Horn, Pilot Rock, Ore., with his reserve grand champion steer, Double M bred and given to him at 1949 PI as outstanding 4-H boy. Center: Double M Herdsman Bill McDonnell holding the calf given by Double M this year to Jim Miller of Centerville, Wash., outstanding 4-H boy for 1950.

Bill Cox, Pullman, with his grand champion FFA steer of the show, an 890-lb. Angus bred by Hinderer Bros., Pullman.

Official get-together at the show, with A. C. Allen, Brookings, Ore., left, PI horse department superintendent, General Manager Walter Holt and Frank Riches, Buena, Wash., right, superintendent of PI beef cattle department.
Can't Complain—

We cannot complain about conditions here in Merced County. Feed is good and irrigation water plentiful. The foothill ranges are a little short but the higher ranges are good. A normal wet winter will bring us out in good shape.

Best regards to WLJ and I hope you publish it 27 years more.—Ken Safford, Merced, Calif.

Lone Wolves—

We were quite interested and pleased to read (in the September Western Livestock Journal) Mr. Empey's article on "How to Cut Calving Losses."

We are almost lone wolves in the center of a "2-year-old calving community," but we agree wholeheartedly with Mr. Empey. We rarely lose a 3-year-old heifer in her first calving and in the last two years, even with poor range conditions, our calf losses have been very low.

Sometimes we have a few "illegitimate" calves in the 2-year-old heifers and almost without exception such heifers fail to calve the following year.

We would rather give these heifers an additional year to grow before they calve than to have them calve at two and skip the next year.—Mr. and Mrs. F. A. Farnsworth, Acehi Polled Herefords, Porterville, Calif.

Outstandingly Satisfactory—

The few days that we spent with the Western Livestock Journal Southern California-Arizona tour were outstandingly satisfactory. Miss Foster, Mrs. Kusterer and I not only learned a great deal about livestock but we enjoyed every part of the program.

We want to thank you again for the opportunity of visiting the ranches and of the unusual privilege of seeing at close hand so many interesting phases of livestock operation.—E. C. Kusterer, Los Angeles, Calif.

Pasture Interest—

Interest in the Yakima Valley continues to develop in good pastures. On our Yakima County pasture in August we counted 385 persons. At that time we visited two pastures—Horace Miller's at Toppenish and E. F. "Sandy" Roberts' at Granger.

Ladino clover is our staple legume in the pasture mixture, and orchard grass

November 15, 1950
STEER CHAMP—Black Shadow, above, was named grand champion fat steer at the 1950 Grand National at San Francisco. Irvine and Timm, Dysart, Iowa, exhibited both grand and reserve champion steers at the Cow Palace. Left to right are Mrs. Irvine, Judge Harvey A. McDougal, Collinsville, Calif., and William Irvine. Photo by Larry Kenney

The many exclusive features of the famous Teco Cattle Squeeze make it the most popular squeeze available. Patented dehorning gate (available separately) securely holds the head and animal for any operation. Yet it swings open to allow the animal to leave through the front. Adjustable for height, it closes automatically. Rear stop gate is spring balanced. Safe, easy to operate. Squeeze ratchet on top draws both sides together simultaneously. Keeps animal on its feet. Locks automatically. Releases instantly. Write for full particulars.

Write for Full Details

THOMPSON & GILL, Inc.
Modera, California

Please send me complete information on the following TECO products:

☐ Cattle Squeeze
☐ Pileirs & Stackers
☐ Fertilizer Loader
☐ Feed Wagon Beds
☐ Portable Grain Elevator
☐ Cattle Stock
☐ Golf Chute

Name...........................................................................................................
Address......................................................................................................
City.............................................................................................................
State...........................................................................................................

is our staple grass. Alta fescue has been used very much also in pasture mixtures and works out fine along with meadow foxtail, especially where the land is somewhat alkaline.

Many of our growers are putting in some birdsfoot trefoil and burnett, but it seems to us in the extension office that these are still in the experimental stage. They are not being included in recommendations from the experiment station at Prosser. Manchurian smooth brome is another grass that shows some promise.

We are having quite a trend toward better pastures for beef as well as dairy cattle and sheep. Stockmen here are now making a real study of pastures. Most of the new ones are going in with permanent broad base furrows so that no reditching is necessary. Most farmers are rotating their pastures and following good cultural methods such as fertilizing and clipping. In recent years there has been a tremendous amount of piping put in so that water is no longer carried in open ditches.

This summer quite a few feeders have run their steers on pastures for a period and then put them into feedlot for 60 days or so to complete the finishing process. Quite a bit of field corn will be going into the silos, mostly trench silos. Soon, corn silage cannot be beat for production per acre as well as for a livestock feed here in the valley. Of course, we have had good pastures available this summer. Steers, ewes and lambs also will be going on beet tops for the fall feeding period. Although we had a late spring, we have had a very good growing season this summer. — M. F. Bunnell, Yakima, Wash.

Late Calving—

We are situated above the real foothill country, but not quite up in the higher mountains, our ranch elevation being from 2,500 feet to approximately 4,000 feet. Our feed was slow in coming this spring, but after it got started it was very good, and the cows all look good now. However, some of them are late calving. This condition seems rather general in our area, and we believe it might be because we had a cold winter. The grass was slow in coming, and cows went into the breeding season too thin.

People in this area have been very much interested in brush burning and reseeding ranges. Quite a few programs were planned, but forest fires were so bad this year that much of this work had to be postponed. We had quite a bad fire here, but there were so many worse fires that ours was important only to us, it seems.

At our ranch we have some irrigated pasture and have found it a life saver for the cows with small calves and a booster for those that need it. Used in conjunction with dry range feed at this time of year, it helps a lot. We would like to have more, and probably will when we can afford it. Some of ours is flood irrigation and some sprinkler. We still have some pretty good dry range feed and have just started to supplement with cake and...
Delaware Racing—
I HAVE a little spread of 470 acres, or farm as we call it. We grow hay, corn, barley, oats, wheat and soybeans. I run about 40 purebred and grade Shorthorns, as well as 160 ewes and a few hogs.
We don't have many saddle horses here, but we do have an awful lot of race horses. Night racing is the thing here. It goes for three to four weeks at one track for one period. Many of the persons at our summer resorts really shove the money through the mutuels.
Of course, this is a chicken and turkey country, too. Some poultry growers run as high as 500 to 1,000 broiler chickens. At 14 weeks they weigh about three lb. and sell for 30 cents per lb.
Our season here has been good, with plenty of pasture.—John W. Houston, Lewes, Del.

Supply and Demand—
HERE in southwest Idaho, things are about normal. We had a very good crop; a few row crops and seed prices are down, but fruit and meats will bring the total income perhaps near last year's. We are, and have always been, opposed to any price supports, unless at full parity, but think the American farmer is well able to stand on his own legs and let supply and demand regulate the price. Someone much greater than our government has always regulated the supply. For instance, our eggs and milk that have been left to rot to hold up the price would have been eaten if prices were those people could afford to pay.
Senator Taft's figure for putting on this program is $700,000,000 a year. The farmers are paying the bill, and this amount is quite some campaign fund. Under this set-up of higher taxes, there is no incentive to go ahead and make anything, then pay it all out for taxes.
We have 400 acres, 300 of which are under irrigation. We get lots of water all year at a cost of around $1 per acre per year. We are putting it all to hay and pasture as fast as we can. We have around 65 cows and heifers to calve this year, nearly all of WHR breeding. Our ranch will raise hay and pasture to keep 100 breeding cows, with calves, yearling bulls, etc.—in all, around 300 to 350 head. We changed our haying methods from loose or baled hay to chopping out of the field and using an elevator to stock it. Three or four of us can put up a lot of hay this way fairly easily.
The last five or six years have put more good bulls out on the range in these parts than perhaps the 20 years time before. I can't recall a time in the last 40 years that it took as few steers to buy a good bull as today.
Followed you folks around on your several tours this summer. Hope you can plan a trip to include these parts—

Mr. and Mrs. John L. McMahan, Owners
Mail Address: Rt. 1, Box 349, CAMARILLO, CALIF., Phone Thousand Oaks 656

Herschel Pruett, Herdsman

The Champion
SHERWOOD BARBARA

McMAHAN'S

NEVER UNDERESTIMATE THE POWER
OF A GOOD COW HERD!

CONSIDERING STARTING AN ANGUS HERD? You
have company. More new ones are in the building today than ever before.
And, the percentage gain in Angus numbers is greater than in any other
breed.

BUT, TAKE A TIP. Look to your foundation females.
Your herd can't be any better than those females. START WITH CHAMPIONSHIP TYPE! START WITH POPULAR BLOODLINES! You'll always be ahead.

Come around and SEE McMahan's. We can set you up with a select group of females and a herd bull to match. Our prices are right—and, if you prefer, you may purchase McMahan's on an Easy Payment Plan.
Top ANGUS breeders of North America offer you your pick at the famous Show Window Sale Thursday, Nov. 30 during the International Livestock Exposition Dexter Park Pavilion CHICAGO

50 TOP, SELECTED CATTLE FROM OUTSTANDING BREEDING HERDS IN 15 STATES AND CANADA

10 BULLS - 40 FEMALES

CONSIGNORS

Bennett, Joseph D., Waunakee, Wisconsin
Boone, Ben, Batavia, Illinois
Cisney, Phillip, Ovell, Illinois
Cochran Farm, North Salem, New York
Cold Saturday Farm, Finksburg, Maryland
Dennis, Paul B., Wilmington, Ohio
Don Head Farmers, Ltd., Richmond Hill, Ontario, Canada
Ehlinger, Betty J., Marshallville, Ohio
Fishback, W. D., Vernailet, Kentucky
A. C. Flint Farm, Bethany, Missouri
Frank, Ivo J., Jefferson City, Missouri
Gondlesworth Farm, Towson, Maryland
Green, Robert E., Oaktown, Indiana
Hamilton, Leslie T., Good Hope, Illinois
Hinton, Marvin, Commercial Point, Ohio
Houston, Mr. and Mrs. Don C., Dunlap, Iowa
Kinnel, Mathias, Elkhorn, Wisconsin
Le Baton Farm, Warren, Virginia

McGregor, Howard L., Rochester, Michigan
Moore, H. B., Lewisburg, West Virginia
Noble, Otis C., Baysport, Iowa
Ohio State University, Columbus, Ohio
Pax, J. Dean, Milan, Missouri
Pickrell, Marshall & Sons, Augusta, Ky.
Pierce, H. W., Monkton, Maryland
Piercy, Loris R., Creston, Illinois
Robinson, Willard & Robert, Massieville, Iowa
Robinson Farm, Madison, Connecticut
Schnaderfer, W. F., Monroe, Maryland
Shadow Isle Farm, Red Bank, New Jersey
Snider, George & Sons, Manteo, Illinois
Studer, Ben C., Wesley, Iowa
Sunflower Farm, Everett, Kansas
Tipton, E. M., Jefferson City, Missouri
J Garrett Tolan Farms, Pleasant Plains, Illinois
Tomlinson Farms, West Frankfort, Illinois
Vaughn Bros., Albion, Michigan
Warner Grove Farm, Greenville, Ohio
West Woodlawn Farms, Creston, Illinois

Frank Richards, Sale Manager
Roy Johnston and Hamilton James, Auctioneers

FOR SALE CATALOG WRITE

Key to Success—

This area receives all its moisture in the form of snow and rainfall during the winter months. Consequently the summers are dry and warm and any livestock being carried for a profit had better be on irrigated land. Although the fellows operating on the national forests usually turn on from June till October and raise hay on their home place, they frequently have to buy more to see them through.

I can’t say too much for the quality of the cattle in this area, although there are some operators who have good stuff—mostly all whiteface through here.

I usually buy weaner calves in the fall, winter them through on good quality hay and pasture them next summer, selling them before the next fall rush. I don’t have much irrigated land to am limited to quantity.

I believe range management is the key to successful range beef production and since the largest percentage of range states are suitable only for that, I believe it rates some merit.

My ambition is to operate a ranch (400-500 head capacity) in Arizona, California or New Mexico. Since I’m originally from Arizona, I’ve got it in my blood and hope someday to make the grade. But that takes money.

—George Bauers, Eagle Point, Ore.

Inspiration—

When I started school at Davis in 1946, I subscribed for your magazine. Now that I have finished school and am on a ranch beginning to get experience and learn the ranching business, your publication becomes ever more enjoyable.

I especially enjoy your series on Cattlemen of the Month and how they got started. It’s encouraging to young fellows trying to get in the business to see how others have made a success.

I hope someday to take a Beef Cattle Tour, but until that time I’ll enjoy reading your coverage on them.—William L. Smith, Elk Grove, Calif.

Obsolete Appendages—

Conditions here are dry. We aren’t really suffering from drought conditions, I guess, but we certainly haven’t had any wet years, either. The last two winters have been pretty cold, and when it gets cold the grass doesn’t grow. When the grass doesn’t grow, the hay stock sure shrinks.

I am one of the thousands of part-time farmers in this country. Land is pretty high around here and water is deep and expensive. My farming is confined to hay, which I feed to my own cows. The cows are Herefords because I like them, polled because I come via Bend, Burns, Prairie City, John Day, Ontario—up 95 from Ontario, Weiser, New Meadows, Riggins, Whitebird, Grangeville, Lewiston, Moscow and Pullman.—Roy J. Fox, Midvale, Idaho.
Your last Pacific Coast Angus auction buying opportunity for 1950

50 HEAD
BULLS and FEMALES

ALSO
25 Commercial Heifers

It's the ANNUAL MADERA, CALIF., SALE—sponsored by the Pacific Coast Aberdeen-Angus Assn., and containing select herd bull prospects, range bulls, farm bulls and herd improving females consigned by leading western breeders.


For catalog and further details, write

L. L. RAFFERTY, Sec., P. O. Box 591, Grants Pass, Ore.

PACIFIC COAST ABERDEEN-ANGUS ASSN.
Bell Boy A. 10th

—That build, transmitted by Bell Boy A. 10th and Bandolier T. 3d, is available to you in our consignment to the . . .

PACIFIC COAST ABERDEEN-ANGUS ASSOCIATION Annual Fall Sale . . .

MADERA SALE BULLS - - -

ANGUSTORRA BELL BOY 52" 1161177 April 26, 1949
Sire: Bell Boy A. 10th 647309
Dam: Enchanted Dorothy M. 3" 651663

ANGUSTORRA BANDOLIER 64" 1092186 May 10, 1948
Sire: Bandolier T. 3" 647650
Dam: Mayflower Maid 3" 713887

AND available in the

SANTA CLARA RANGE BULL SALE, SAN JOSE, NOV. 18

ANGUSTORRA BANDOLIER 70" 1092203 May 30, 1948
Sire: Bandolier T. 3" 647650
Dam: Blackcap Henderson 63" 673007

ANGUSTORRA BELL BOY 64" 116752 May 14, 1949
Sire: Bell Boy A. 10th. 647309
Dam: Black Jestress of Angustorra 724795

ANGUSTORRA BELL BOY 67" 116762 May 21, 1949
Sire: Angustorra Bell Boy 18th, 965574
Dam: Mayflower of Angustorra 7". 958588

WAUGAMAN RANCH
WATSONVILLE, CALIF.

Home of the

ANGUSTORRA HERD

A. L. WAUGAMAN, Owner
Phone 4-9097
think that horns are obsolete appendages. This is strictly a cow and calf operation. Grain is pretty high and I feel that I get the most for my efforts from selling my calves at weaning time.
—Harold Hitchings, Watsonville, Calif.

Production Counts!

We do not plan to grow wheat and ship it off the farm, nor to produce hay in the form of good alfalfa and ship it off to the coast, but ship it off on four legs and retain the fertilizer here on the farm. It is easier that way and also if we do not we will not have anything to leave to our sons, as the farm will be down Walla Walla and Columbia Rivers into the Pacific, and ship it off to the coast, but ship itduce hay in the form of good alfalfa

We are a little short of dry feed, but we are now gathering cattle up in south of Sacramento, and have had two light early rains which we could sure use in this part of the country, as the last two winters have been very bad ones. Last year we had our show record as individuals.

And, A Successful 1st Annual Sale

Due to the acceptance of Gutteridge Angus by these buyers

Lloyd Barron, Fairfield, Idaho
Clifford Lederfer, Sloughhouse
Jerald Hozapfel, Willows
Penton O'Connell, Gilroy
Carl Hoffman, Live Oak
J. L. McChish & Son, Winter
Douglas Fraser, Redding
Stanley Sinclair, Ione
Mr. & Mrs. Walter B. Slinker, Hughson
M. Carrini, Klamath Falls, Ore.
Don Edwards, Elk Grove
W. Pickworth, Modesto
A. C. Korth, Ixion

John Fransling, Elk Grove
Carroll F. Dow, Lodi
John Clark, Zamora
Henry Fraz Jr., Clements
Joan Rae Clark, Zamora
Ivan R. & Genevieve Lehman, Shingle
Leroy Miller, Sacramento
Thos. Edwards, Wilton
M. L. Snyder, Elk Grove
E. B. Ivy, Sacramento
Leonard F. Weber, Fair Oaks
Grellish Bros., Drytown
Harold Cottburn, Jr., Plymouth

Our sincere appreciation to the buyers whose purchases made a $564 average in our first sale. And, to all the buyers who made 1950 a banner year for us.

JAMES R. GUTTRIDGE
ELK GROVE, CALIF.
PH. 7653

On Highway 99, 18 miles south of Sacramento

PALOMAR ANGUS RANCH

FOR SALE: A number of open heifers of real foundation quality. Also a couple of excellent herd bull prospects.

T. R. DEMPEY, Owner
1004 Pacific Mutual Bldg.
Los Angeles, Calif.

Kenneth Gross, Mgr.
Palomar Angus Ranch
Pala, Calif.

Phone: Pala 2136

Page 49
A PAT HAND THE WORLD OVER!

You Can’t Beat Aberdeen-Angus

You Are Investing NOT Gambling When You Buy Aberdeen-Angus Cattle

Because...

- Aberdeen-Angus popularity is in the ascendency all over the country, particularly are they "taking the eye" of commercial operators and purebred breeders in the West.
- Aberdeen-Angus cows are exceptional mothers—they give lots of milk and that means greater gains on their calves. Small calves at birth mean less calving trouble and that means more calves raised.
- Aberdeen-Angus, fast maturing, have long been "Market Toppers" in leading markets the country over. Easy fleshing qualities of the breed make them highly desired by feedlot operators and farmers. Meat men know that the highly marbled Aberdeen-Angus meat is more tender and has that extra flavor.
- Aberdeen-Angus are naturally hornless. They breed off horns practically 100% in cross breeding and give the calves that all important "hybrid vigor" that makes faster growing, earlier maturing, higher profit cattle over the scales.
- Aberdeen-Angus are a better investment dollar for dollar, every way you look at the cattle business.

Show and Breeding Stock
Herd Bulls and Commercial Stock Always for Sale

QUALITY!

Terndale Ranch
SANTA PAULA CALIFORNIA
REGISTERED QUARTER HORSES
AND ANGUS CATTLE

Visit us at Rancho Del Corral, 20705 Van Ozen St., Camoga Park
getting 28 to 30 cents for weaners on the ranch with no shrinkage—that’s to feeders. Cows to calve this coming season are selling for around $250, but are hard to find. Most stockmen are building their herds up instead of letting these high prices influence them to sell.—Bill R. Stewart, Auburn, Calif.

**Long Pull—**

For farmers and dairymen it has been a long pull. High costs of labor, low water supply and cattle replacements for dairy purposes have been too high. Some farmers, especially dairymen, will be forced out of business because of higher costs and bigger investments for farm machinery and milk cattle.—Donald Furtado, Newark, Calif.

**Enormous Future—**

I have been reading WLJ regularly for seven years, and it has always been to my liking. Some of the articles I have given particular interest to recently have been those dealing with irrigated pasture. I feel that this phase of agriculture and livestock has an enormous future as population increases and better seeds and water rights are established.

In central Utah, irrigated pasture is just beginning. Utah has much land that is alkaline and now grows only grasses and weeds tolerant to large amounts of salt. The last year there has been quite a bit of attention paid to Kochia, the new seed that has been imported and will grow well in alkali ground. This is not the garden variety. Experiments show it will produce five to seven tons of hay per acre and that it is higher in protein than alfalfa, which is the principal forage crop. Also, corn silage is being used more and more to winter cattle on.

We expect the Central Utah project of the Colorado River eventually to bring much-needed water to this part of the country and with it many more acres into cultivation.—Glade B. Draper, Santaquin, Utah.

**Airplane Seeding Overcomes Adverse Range Conditions**

Winter grazing on a range in Colusa County, California, where no grazing has been possible for 25 years, has resulted from an airplane seeding to smilo and Harding grass under the direction of agronomists at the University of California.

The 300-acre burned range was fenced to control grazing and now has an average of one smilo plant per square foot and one Harding grass plant every two square feet, according to Prof. Merton Love, under whose supervision the range is being converted to forage.

After a chamise burn four years ago, 40 species were planted. By last year only three had survived adverse weather and soil conditions. These were smilo, Harding grass and stipa, a native bunch grass not available commercially.

The trials have been conducted on land owned by Wendell H. Payne of Woodland, a cooperator in the experimental work.
We are pleased to announce the sale of 128 brood cows from our commercial herd to . . .

Dr. S. T. Clarke, Tumbling 1Q Ranch
Franktown, (near Reno) Nevada

Doctor Clarke during the past year or so has established a registered herd of Aberdeen-Angus cattle and now rounds out his operations with the acquisition of a herd of commercial brood cows from Hacienda. It will be recalled that from our commercial herd, 4-H and FFA exhibitors have obtained steer calves that have won top honors at county, state and regional fairs and stock shows in California.

We are happy to see these commercial cows, which have been improved year after year through the use of top quality herd bulls, go to Doctor Clarke, who in 1951, will have available top quality steer calves from his commercial herd—and range bulls from his registered herd. His registered herd is headed by Prince Barry Revolution by Palomar Prince, Marshallmere 18 and Bandolier Rea, undefeated show calf and top selling bull at the 1950 Sacramento Sale.

Look for HACIENDA ANGUS at the PCAAA Sale
Dec. 10-11, Madera
We're selling two top bulls. You'll like them!

Hacienda de Los Reyes
Mr. and Mrs. Wm. G. VOLKMANN, Jr.
Ranch 7½ miles south of Selma, Calif., on Central Valley highway.
Phones 79R1 or 47J2

IN THE HEART OF THE FERTILE SAN JOAQUIN
SELMA CALIFORNIA

HARVEY WILLIAMS
DAVID LUCKETT
Herdsmen
M. B. OLESEN
Foreman
animals. It is interesting to note that every animal, from yearlings up to the old cows, is decorated every spring with a bell.

The Bacchis buy these bells by the dozens. They are all shapes, sizes, and tunes. This belling system reduces labor costs in gathering cattle and in keeping hunters from shooting animals on the open range. It also cuts down losses caused by animals straying to other ranges.

The bells are removed from the animals in the winter time. During the slack period the bells are repaired, new clappers are installed and bell straps are mended. Leather to make the straps is purchased by the hide. It is interesting to see the systematic way in which these cowmen go about this practice of belling their cows in the spring. Belling time becomes one of the big occasions on most of these ranches. Some cows get the same bell each year.

'Music' Experts. Cowboys become experts on cow bell "music" and can tell what cow it is in the brush from the tune of the bell a quarter of a mile away.

Francis Bacchi can display some bells with bullet holes in them, the result of some so-called hunter practicing his marksmanship on one of Eldorado's bells. There is no question that this practice of belling cattle in steep, inaccessible country is a labor-saving device that pays big dividends. But it happens to go a little deeper than that.

Most cowmen get a great thrill out of hearing the musical tune of a bell worn by a white-faced cow while grazing on the grassy, shady banks of a mountain stream in an alpine mountain valley deep in a yellow pine forest. This is sweet music to their ears. We know it is if it is coupled with the sound of a bawling bull pursuing his challenger in the early morning or a lone cry of a coyote calling his mate at dusk on a summer evening.

The bells are one of the pleasures and thrills real cattle people get out of their business—they can't be measured in dollars and cents. The sound of a cowbell in the woods and mountains can be a powerful lift to a tired cowboy riding the outskirts of the open range.

**Off Color**

By S. OMAR BARKER

I'm a real anti-Red — on that you can bet —

For which I ask nobody's pardon!

I don't even think I am going to let

Pink radishes grow in my garden!
PURPOSE: MEAT
Continued From Page 38

Keep Records. As for records, McCann advised breeders to (1) keep a careful record of breeding dates, name and identification of all bulls used; (2) record all calving dates, including sex; (3) tattoo calves immediately after they are dropped; (4) report transfers at once to the proper breed association, giving the date of sale.

Concerning nurse cows, McCann said they would not interfere with the life of the mother, free her to her primary duty, which is producing calves, "and give you a better calf." It's harder on the mother to raise a calf after birth, than it is for her to feed it within her body. However, he said a nurse cow for every calf is unnecessary.

Cows Important. "A good bull is half your herd," H. B. Osland, manager of the Staley Hereford Ranch, Pullman, Wash., stated in telling how to select females for a beef herd. "And a poor bull is almost all of your herd. But cows are important, too."

The high-priced cow, if she fails to produce, is cheaper at the butcher's than in the herd, he said.

C. E. Lindley of the WSC animal husbandry department said there was a place in the cattle industry for "small-type" cattle. He described experiments with the smaller animals being conducted by Colorado A & M College.

"The smaller cattle may be just the thing for the smaller operator," Lindley said. He added that these animals will gain as much weight for each pound of feed as the larger ones.

Performance Testing. "Why Performance-Test Beef Cattle?" was the question discussed by Charles R. Kyd, extension livestock specialist at WSC. His answer was that keeping a record of the "doing ability" of the sons and daughters is the only way breeders can really find out how good their bulls and cows are. "With records," Kyd said, "you can find the high-gaining animals and keep them for breeding." Bulls that make high gains tend to sire calves that gain well, he said, adding that depth of body best indicates doing ability.

Meat loss through bruising of animals in shipment to market was discussed by Tom Meyer of WSC. Describing an experiment at Armour and Company, Spokane, Wash., Meyer said 836 of 4,371 cattle slaughtered by the company during one period carried bruises that reduced their value. The grower eventually foots the bill, he emphasized, and meat costs are inevitably higher for the consumer.

On the Feeders Day program, Dr. Burch H. Schneider, WSC animal husbandry department, said antibiotics make hogs grow faster, as they do chickens. Schneider recently ran a 12-week feeding trial with several sets of pigs. Animal protein, Vitamin B-12, dehydrated alfalfa, soil, and terramycin, an antibiotic, were fed to the pigs. The terramycin swine did best of all, growing faster and making more meat for the same amount of feed. Schneider thinks that when antibiotics-in-feed is perfected, hog feeders can grow more meat at less cost—meaning more and cheaper pork chops for the consumer.

Peas for Hogs. WSC's E. E. Goodwin said that experiments have shown that peas supplemented with either pasture or alfalfa meal are as good as most protein supplements for pigs. So, if swine feeders can get pea protein into their pigs, it might mean they wouldn't have to import protein feeds from other areas—and part of the Northwest's pea surplus would dissolve.

Feeding more silage to cattle during the winter might save farmers some money, Dr. M. F. Ensminger said. Tests on silage feeds have shown that yearling, 2-year-old and 3-year-old heifers gained faster on silage and hay than on hay alone.

Lindley had much to say about the

"Rebuilding of sheep flocks in our section of the country is going to be done largely under fence instead of out on the range with herders as in the past," says John S. Otto of Clay­ton, N. M. He tells of several Clay­ton stockmen who have built many miles of sheep fence for their new flocks. Avoiding labor problems is one of the prime movers in this de­velopment which has been carried far in Texas and which is used in some sections of South Dakota, Montana and other states.

Little Waste. Little silage is wasted in feeding because cattle eat it all; silage is the best way to preserve many by-products, such as sweet corn can­nery refuse, pea vines, beet tops and many others common in the state. Too, it can be put out in weather when hay would be ruined; nutrients in certain crops are preserved better by ensiling than any other method of storing it.

There is no leaching of vitamins, proteins and other nutrients, and, fin­ally, silage will enable cattle to win­ter well on a poor quality of hay that would otherwise do a very poor job of it.

After the beef cattle type conference was over, Warren L. Harter of Spo­kane started the race for the annual barbecue, which he and Mrs. Harter sponsored this year. Two 800-lb. steers were slaughtered for the event, where from 1,000 to 1,200 persons gathered.
The APPRECIATED Christmas Gift!

"I look forward to each issue of the Journal. I'm very grateful to a friend for introducing it to me."
"I was given a year's subscription to the best magazine I have read."
"I think it is the best stock paper I have ever received."
"I enjoy the Journal very much and would be lost without it."

For more than 27 years, WESTERN LIVESTOCK JOURNAL Gift Subscriptions have consistently prompted such words of appreciation. There is very definitely an implied compliment when you give WESTERN LIVESTOCK JOURNAL and you can be sure that your gift will be of genuine service to your friends, clients and customers.

Unlike most gifts at Christmas, a WESTERN LIVESTOCK JOURNAL Gift Subscription lasts throughout the year. Twelve monthly feature issues and 52 timely weekly newspapers total, in all, 64 reminders of your thoughtfulness, foresight and good will. This year, give WESTERN LIVESTOCK JOURNAL — welcomed by stockmen throughout the West. A special Gift Card bearing your name as donor will precede the first issue.

<table>
<thead>
<tr>
<th>SPECIAL GIFT RATES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Year Subscription $3.00</td>
</tr>
<tr>
<td>2 One Year Subscriptions $6.00</td>
</tr>
<tr>
<td>5 One Year Subscriptions $10.00</td>
</tr>
</tbody>
</table>

Enclosed find $__________________ in payment of Gift Subscriptions to go to the following addresses:

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Town</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Town</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Your name ________________________________

Address __________________________________

Town __________________ State______

Mark Gift Cards from: ________________________

Use separate sheet for additional names.
**Pasture Forage—**

**Fertilization Affects Composition of Forage on Phosphorus-Deficient Soils**

By V. V. RENDIG, W. E. MARTIN and F. F. SMITH

IRRIGATED pastures are often the cheapest source of livestock feed, according to recent cost studies. Wide differences in pastures productivity exists and yields may often be increased greatly by changes in grazing management, irrigation practices or by fertilizer applications.

On some soils phosphate fertilizers applied to pastures consisting of grasses and legumes may favor the growth of ladino clover, trefoil and other legumes. In other cases sulfur-containing fertilizers may have a similar effect in stimulating legume growth. Nutrogenous fertilizers, on the other hand, may stimulate the growth of grasses, sometimes at the expense of the legumes.

Fertilizer tests were begun in 1948 in Shasta County, California, to find how the yields, the proportion of legumes to grasses and the chemical composition of forage were affected by the application of phosphorus fertilizers to soils acutely deficient in this nutrient. Exploratory tests were laid out in which nitrogen-, phosphorous-, potassium- and sulfur-containing fertilizers were applied, each alone and in all possible combinations with each other.

**Increased Growth.** Certain red terrase soils in the Anderson-Cottonwood area were found to be acutely deficient in phosphorous. Total growth was greatly increased where phosphorous or phosphorous plus nitrogen were applied. It was also noted that these effects were not obtained on similar soils.

**Effect of Phosphate Fertilization on the Yields and Phosphorus Content of Forage Grown on Irrigated Pasture in Shasta County near Cottonwood.**

<table>
<thead>
<tr>
<th>Phosphorus applied per acre</th>
<th>Hay per acre (Growth period: 7/13-10/20)</th>
<th>Percentage of P in dried forage</th>
<th>Hay per acre (Growth period: 6/15)</th>
<th>Percentage of P in dried forage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lbs. P2O5</td>
<td>Lbs.</td>
<td>%</td>
<td>%</td>
<td>Lbs.</td>
</tr>
<tr>
<td>0</td>
<td>455</td>
<td>0.125</td>
<td>0.119</td>
<td>238</td>
</tr>
<tr>
<td>50</td>
<td>640</td>
<td>0.148</td>
<td>0.137</td>
<td>778</td>
</tr>
<tr>
<td>100</td>
<td>750</td>
<td>0.162</td>
<td>0.156</td>
<td>995</td>
</tr>
<tr>
<td>150</td>
<td>1,305</td>
<td>0.170</td>
<td>0.162</td>
<td>1,388</td>
</tr>
</tbody>
</table>

Maximum gain over check: 187% 36% 36% 483% 33% 47%

*Applied July, 1948, using treble superphosphate as source of phosphorus.

**Effect of Phosphate Fertilization on the Yield and the Percentage of Legume in Forage from an Irrigated Ladino-Grass Pasture in Shasta County near Anderson.**

<table>
<thead>
<tr>
<th>Phosphorus applied per acre</th>
<th>Hay per acre (Growth period: 4/30/49 to 6/15/49)</th>
<th>Percentage of legume in dry forage</th>
<th>Hay per acre (Growth period: 7/20/49 to 10/13/49)</th>
<th>Percentage of legume in dry forage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lbs. P2O5</td>
<td>Lbs.</td>
<td>%</td>
<td>%</td>
<td>Lbs.</td>
</tr>
<tr>
<td>0</td>
<td>930</td>
<td>68</td>
<td>44.5</td>
<td></td>
</tr>
<tr>
<td>112</td>
<td>2,680</td>
<td>955</td>
<td>65.6</td>
<td></td>
</tr>
<tr>
<td>225</td>
<td>2,615</td>
<td>1,210</td>
<td>65.7</td>
<td></td>
</tr>
<tr>
<td>450</td>
<td>3,460</td>
<td>1,690</td>
<td>66.5</td>
<td></td>
</tr>
</tbody>
</table>

*Applied March 16, 1949, using treble superphosphate as source of phosphorus.

**Effect of Phosphate Fertilization on the Phosphorus and Protein Content of Forage Grown on an Irrigated Ladino-Grass Pasture in Shasta County near Anderson.**

<table>
<thead>
<tr>
<th>Phosphorus applied per acre</th>
<th>Percentage of phosphorus in dry forage</th>
<th>Percentage of protein in dry forage</th>
<th>Calcium: phosphorus ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lbs. P2O5</td>
<td>Ladino</td>
<td>Grass</td>
<td>Whole forage</td>
</tr>
<tr>
<td>0</td>
<td>0.161</td>
<td>0.185</td>
<td>0.175</td>
</tr>
<tr>
<td>112</td>
<td>0.192</td>
<td>0.253</td>
<td>0.218</td>
</tr>
<tr>
<td>225</td>
<td>0.243</td>
<td>0.330</td>
<td>0.272</td>
</tr>
<tr>
<td>450</td>
<td>0.244</td>
<td>0.390</td>
<td>0.293</td>
</tr>
</tbody>
</table>

WESTERN LIVESTOCK JOURNAL
which had previously received a heavy application of manure.

Rate tests were laid out next to find how much phosphorous and nitrogen should be applied for the most satisfactory and economical production of pasture forage.

Total yields of forage were measured and samples taken from each plot which were separated into grass and legume fractions. The separate fractions were then dried, ground and analyzed for various constituents.

Plot Mixtures. The first plot near Cottonwood consists largely of bermuda grass, orchard grass, dallis grass and prostrate trefoil—Lotus corniculatus. The second plot near Anderson was mainly a mixture of ladino clover and miscellaneous seeded grasses. The rate test at Cottonwood was set up in the summer of 1948. Cattle were excluded. One cutting of forage was made in October, 1948, and a second cutting made in June of 1949. Nitrogen treatments caused an increase in grasses at the expense of the trefoil during the first season. There was no carry-over effect of nitrogen the second season.

Phosphorous treatments—treble superphosphate applied at rates of 50, 100 and 150 lb. of available phosphoric acid per acre caused a very large increase in yield which persisted throughout the second season and is still evident in 1950. The highest rate of phosphorous caused the greatest increase in growth and it seems likely that a higher rate might have been desirable.

Phosphorous Fertilization. The phosphorous content of both grass and trefoil was increased by phosphorous fertilization. The maximum increase in phosphorous content was about a third more than the untreated, while total yields were increased three to five times. In every case the percentage of phosphorous of the grass was slightly higher than of the trefoil of the same treatment.

The test at Anderson was set up in February, 1949. One cutting was made in June. The plots were grazed during the summer and a second cutting made after a growth period of six weeks in the fall.

Phosphate fertilization—treble superphosphate applied at the rates of 112, 225 and 450 of P₂O₅ lb. per acre caused a large increase in growth, and an increase in the proportion of ladino clover in the forage.

The grasses grown in the pasture mixture were obviously stimulated since the yield increases were much greater than could be accounted for by the increased proportion of ladino clover.

Protein Increase. Chemical analyses of ladino and grass fractions again showed that the phosphorous content of both grass and legume was increased by phosphate fertilization, and that again the grass was somewhat higher in phosphorous values than the legumes. The protein content of the whole forage was increased by fertilization. Part of this increase was due to a larger proportion of high-protein ladino in the mixture and part to an actual increase in the protein content of the grass.

An evaluation of the nutritional significance of changes in plant composition using chemical analysis alone, assumes that any increase in a nutritionally important constituent is beneficial.

Fundamentally, such aneption is probably valid, but may not be reflected by animal response under practical feeding conditions because of several reasons:

1. The percentage of a constituent which may be changed by fertilization may already be adequate for animal needs.

2. Other dietary constituents may be limiting the growth or well-being of the animal.

3. Supplemental feeding of concentrates may overcome apparent deficit in the forage.

Content Boosted. The crude protein content of the whole forage from the Anderson plot was increased from 16.4% up to 19.3% as a result of phosphate fertilization. If ample feed from both plots was available, animals grazing on the higher protein plot would not necessarily perform better than those grazing the unfertilized plot since the latter produces forage that would
DIG HOLES
SITTING DOWN

—and "Fence 'em In!"
The Danuser Digger Attachment digs holes fast and economically. Easily installed on most popular tractor makes; Quality built; Timken bearings, augers 4" to 24". Averages 500 to 600 holes per day! Cattlemen demand modern equipment; and these attachment kits are engineered to permit the use of other three-point mounted instruments. Write Dept. C,

DANUSER MACHINE CO., Fulton, Mo.

Also Manufacturers of the Famous Danuser All-Purpose Blade

FARNAM "One Man"

STOCK SQUEEZE CHUTE

Your Best Buy!

Safer for animals and operators! Easier to use! Faster to operate! Completely restrains any size animal. Built strong enough to hold the toughest range steer; yet light enough to toss on a pick-up and move from job to job. NO LEVERS to get injured on!

One Man easily catches, holds and treats animals without help or with help, can handle more head per hour with less man power. The result of 15 years experience building and operating chutes, the Farnam Chute gives you all the features you want, construction that animals can't damage, and at a price you can beat.

FARNAM EQUIPMENT CO., Dept. 10,
OMAHA, NEBR., or PHOENIX, ARIZ.

Send Illustrated Literature on "One-Man"
Stock Chute and 10-Day Trial Offer

Name
Address
City, State

SHOWMAN—Future Farmer Ted Goode of Escondido, Calif., is shown above with the bull he used in winning showmanship contest at recent 7th annual FFA Field Day sponsored by Bank of America. The bull is from the Angus herd of Thomas R. Dempsey, Palomar Angus Ranch, Pala, where the field day event was held.

Effect of Fertilization. Changes in the forage resulting from phosphate fertilization other than the increase in the percentage of phosphorous and the decrease in the calcium/phosphorous ratio must be considered in interpreting the effect of fertilization on the nutritional value of the forage. For example, the proportions of the various kinds of grasses may be different in the forage from the fertilized plots than that from the check plots. This may have an effect on the palatability and on the distribution of the forms in which various constituents exist in the plant and, consequently, on the ability of livestock to utilize them.

Further research—including actual trials—will be necessary before a complete interpretation of the effects of fertilization on the forage of irrigated pastures can be made.

While phosphorous fertilization is only one of a number of factors which determine the yield and quality of feed produced, the studies reported here indicate that on some soils at least it is an important one.

V. V. Benady is junior soil chemist at the University of California College of Agriculture Experiment Station, Davis; W. E. Martin is associate agricultural statistician, Agricultural Extension Services, University of California College of Agriculture, Berkeley; and F. F. Smith is Shasta County Farm Advisor.

STAR FARMERS—Raymond C. Firestone, vice president of the Firestone Tire & Rubber Co. (right), talks over farm problems with four regional Star Farmers during the 23rd annual convention of the Future Farmers of America in Kansas City last month. Left to right are: Rolland Turnow, Curtis, Ohio; Budd Ott, Bangor, Pa.; Paul Crawford, Moos, Utah; Forrest Davis, Quincy, Fla. (chosen at Star Farmer of America); and Firestone.
It’s Here Again!

THE WEST’S LEADING

POLLED EVENT
DENVER, COLORADO
DEC. 7-8-9

★

YOUR OPPORTUNITY . . .
to secure foundation Polled Herefords—the best the breed affords—in this premier show and sale—in the heart of the beef cattle industry.

A NEW EVENT . . .
Bulls in pens of 3—shown and sold in pens of 3—especially attractive to commercial cattlemen.

BREEDERS . . . COMMERCIAL CATTLEMEN . . .

Don’t miss this big show and sale.

For catalog and other information write:

NATIONAL WESTERN POLLED HEREFORD ASSOCIATION

FULSCHER-CASEY
Managers

7845 W. Colfax
DENVER, COLORADO

John Rice
President
Paul Pattridge
Sec.-Treas.
Robert Halbert
Vice-President

November 15, 1950
Seeding Burns—
Value of Proper Improved Range Management Cited
By J. R. BENTLEY
and
M. W. TALBOT*

A GOOD cover of herbaceous plants is especially needed during the first season after a brush burn. Establishment of this cover may occur naturally under certain conditions; under others, artificial reseeding is an important step in any program aimed at converting brush-covered land to open and more productive range lands.

What can the first-year cover of grass do in the conversion process, which may extend over a period of a few years? Grass established in the first fall will give some protection to the bared soil during the winter and will reduce the establishment of brush seedlings the following spring. The result is a more open brush stand and a good ground cover of herbaceous plants for at least a few years.

The grass provides fuel for a reburn if reburning is advisable. In addition, reseeding provides the opportunity to improve the forage through the establishment of superior species.

Illustration. How an artificially reseeded grass cover may slow down brush re-establishment following a hot fire in dense brush is well illustrated by repeat photos taken over a period of years from fixed camera stations on a burn at about 2,500 feet in elevation near Ahwahnee, Madera County, Calif. Rapid establishment of brush seedlings was typical of the unseeded portions of the burn wherever dense brush had been consumed. Much slower re-establishment of brush occurred on the one small area that the landowner seeded with cereal rye.

Especially important in interpreting the observations of these plots is the fact that they are on sites that will grow a relatively heavy stand of grass. Naturally, such sites provide the best opportunity for establishment of a good grass cover and for conversion of dense brush to more open productive range.

In open brush the greatest need is to reseed the scattered “hot spots” where fire in thickets of brush leaves a comparatively thick layer of ash. Natural revegetation usually will provide a satisfactory herbaceous cover over the remainder of the burn.

Soil Protection. Reseeding will be desirable for soil protection wherever fairly large brush thickets are consumed. Likewise, reseeding will help to establish a herbaceous cover to retard brush re-establishment in these spots the next spring. Soil protection during the first winter is not a serious consideration if the ash spots are small and widely scattered. Where the ash spots are small, grass will gradually be established by natural invasion. Nevertheless, the increased forage the first year from reseeding ash spots may well be worth the effort and cost.

Regrassing a burn during the first year, then, appears to be a primary step in converting brushland to open productive range. Artificial reseeding is especially needed as a regrassing measure following burns in dense brush. Artificial reseeding may also serve another important aim: to improve the quality of forage obtained after the brush stand has been opened.

If perennials are to be established there are certain advantages in seeding them the first year following a burn, wherever seeds of resident annuals have been destroyed. Slowly developing seedlings of perennial grasses

---

BUY THIS HALBERT DALLAS CHAMPION
She shows and sells in the
NATIONAL WESTERN POLLED HEREFORD SHOW & SALE, DENVER, DEC. 7-9

Miss Domestic Mischief 11th
She’s by DOMESTIC MISCHIEF 6th and bred to our champion bull, DOMESTIC MISCHIEF 259th. Here’s your championship type, backed by champion-producing breeding. And, think what a calf she should have!

We’re also selling, in the Denver sale, Dec. 9, a Miss Advance yearling heifer (she’s been standing high in the shows) by a top son of DOMESTIC WOODROW.

And—THREE BULLS. One by DOMESTIC WOODROW and two by sons of his. You’ll really like them.

R. A. HALBERT, SONORA, TEXAS

---

*This text is separated from the rest of the page, suggesting it might be continued on another page.
cannnot be readily established later on, after a dense cover of herbaceous plants has developed. Experience has shown that competition of annuals must be reduced either by brush burning or by cultivation.

Annuals Help Control. Observations also have indicated that perennial grasses alone may not control the site against rapid establishment of brush seedlings, at least when perennials are seeded at a fairly light rate. But addition of rapidly growing annuals to a mixture containing perennials will help establish the needed herbaceous cover the first year following burning.

It does not appear advisable at present to sow much expensive perennial seed on scattered ash spots in burns of open brush, especially at lower elevations where growing conditions are more adverse.

Resident annuals will soon become established along with the reseeded forage species on burned-over foothill land. These annuals have definite grazing value.

Thus, a full program of range improvement on brushlands involves not only reduction of brush and increase of grass, but also subsequent management to fit the improved range into the needs of the particular ranch.

*This summary of the authors' findings on seeding brush burns is taken from "What We Know About Brushland Management in California," a publication assembled by Milton D. Miller of the University of California Agricultural Extension Service. Mr. Bentley is range conservationist with the California Forest and Range Experiment Station, and Mr. Talbot is the station's associate director.

YOU still have time to make selections from our supply of bulls, ranging from 1950 calves on up to service age bulls. See them at the ranch . . . and you will want them.

These bulls are in good, thrifty condition, ready for you to turn out on your pastures. They have been carried on our pastures with just enough supplemental feed to keep them coming along.

They're sired by our strong battery of good-headed, heavy-quartered, thick, deep herd bulls. They're so strong in top-notch Polled breeding that you can anticipate a high percentage of naturally polled calves, even if all your cows are horned. (Less than 5% of our 1950 calf crop even carried scurs).
Feed to Sell—
Consistent, Intelligent Care Is Big Difference in Producing Good Cattle

By JOHN W. ALGEO
Instructor of Animal Nutrition
California State Polytechnic College

In feeding bulls and heifers for sale, one question which continually comes up is "How much finish should I put on my sale cattle?"

At the present time we have two main schools of thought on the subject: One is that a man has no way of knowing whether or not an animal has the ability to put on fat unless the animal is seen while carrying a high degree of finish. The other school of thought is that one can effectively select breeding stock in "their working clothes" and that there is no need for excessive fattening of bulls and heifers for sale.

In answering this question one must consider not only the immediate future and the amount to be realized from an individual sale, but also the future reputation as a producer of breeding stock. Highly finished cattle may bring a good price at a given sale, but if the animals do not produce well for the buyer, it may be quite a while before he is willing to pay a good price for that stock again. On the other hand, a thin, rough animal may bring little more than the market price on sale day. Consequently, it would appear that perhaps the best answer is to take a middle-of-the-road course and to feed sale cattle to a point where they are in good, thrifty condition and are carrying enough finish to be smooth but do not carry an excessively high covering of fat.

In feeding the sale bull or heifer, we must begin farther back than a few weeks or months before the sale. In fact, we should consider first the proper nutrition of the dam, for it is a well-known fact that a run-down or neglected cow will usually drop a weak or small calf. It has also been shown that the larger, more vigorous calves at birth are the ones which are the largest and most vigorous at weaning time, and usually go on to become the most desirable cattle at sale time from the standpoint of size, scale and weight for age. In short, the calf which has the best start has much the best chance to sell well at sale time.

Feeding Program. Common sense should dictate the feeding program for the cow. In most localities there is little need to worry over high priced supplements of minerals, vitamins or proteins, because as long as the cow has plenty of good grass and water and is allowed stabilized iodized salt and steamed bone meal free choice, she will feed adequately.

If the grass becomes dry and feed conditions are rather poor, as they may be at certain times during the year, then the pregnant cow should be fed supplementally. Even under such conditions, however, there is no need to feed expensive compounded supplements. It should be remembered that good quality alfalfa hay will supply all of the protein, TDN, and vitamins needed by the cow, except vitamin D, which is usually supplied by the sun's rays.

In order to insure rapid growth in the calf, it should be creep fed while it is on pasture with the dam. Naturally, under some range conditions creep feeding is a difficult proposition, but on most purebred ranches it is not only possible but economical. It should

---

GOLD STAMP
by GOLD MINE

He's your buy at

DENVER - DECEMBER 9

GOLD STAMP features our consignment to the NATIONAL WESTERN POLLED HEREFORD SHOW AND SALE at DENVER, DEC. 7-8-9 (the sale is Dec. 9). He's our 2-year-old show bull that has been doing so well. He has everything you would expect in a top son of GOLD MINE—thickness, fleshing ability, powerful head and modern stamp. ALSO selling a JUNIOR BULL CALF by GOLD MINEx, and another classy JUNIOR BULL CALF by GOLD DUST. See them all at Denver, Dec. 7-8-9.

Orvil E. KUHLMANN, North Platte, Nebraska
be remembered that the calf’s most critical requirements when young and growing will be for protein to build tissues, for calcium, phosphorus and vitamin D to build bone, and for carbohydrates and fats to provide energy.

Creep Ration. The creep ration can be quite simple, and many operators get excellent results with whole or crimped oats. Others like to mix about 1/2 lb. per head per day of linseed meal with the oats. A precaution that might be mentioned here is that linseed oil meal is a laxative feed. If the calves show signs of scouring on it, either cut it down or take it out of the ration. About 8% of the concentrates is usually the upper limit at which linseed oil meal is fed.

Cottonseed meal may be used, but it is less desirable than linseed meal for young calves. Also, it has been shown that calves make the best use of cottonseed meal when they have an extremely good source of vitamin A in their ration, such as green grass or good legume hay.

In creep feeding the calves, feed can be kept before them at all times. Don’t worry about the calves eating too much at this stage of their lives. Rather remember that calves make the most economical use of their feed during their first six months. Here again a simple creep ration such as oats will usually be more effective and economical than a complex, expensively compounded ration.

Final Period. During the final feeding period when sale cattle are placed primarily on a concentrate ration, they can usually be fed stronger rations than cattle which are to be placed in a show string. It is not necessary for the operator to hold sale cattle in a high “bloomy” condition for a long time. Consequently, many times sale cattle are fed “hotter” feeds such as corn in amounts which would be much too high for show cattle.

In starting the calves on feed the rancher should not begin with a heavy grain ration. Ruminant animals must have time to become accustomed to concentrate-type feeds or digestive dis-

---

**2 GOOD BULLS . . .**

**Selling at the . . .**

**NATIONAL WESTERN POLLED HEREFORD ASSN. Sale,**

**DEC. 7-9, Denver, Colo.**

**Both BACA GRANT breeding—**

**good, burly heads, deep, good boned bulls — lots of thickness**

- MY TRUMODE BACA 9 5956837 calved Mar. 28, 1949
  SIRE: Trumode Domino 56 4099502
  DAM: Baca Heiress 37 3576412
- MY TRUMODE BACA 8 5956836 calved Jan. 15, 1949
  SIRE: Trumode Domino 56 4099502
  DAM: Baca Heiress 109 4093922

**MONTE & GLADYS YOUNG**

On Highway 1, 11 Miles North of SAN SIMEON, CALIF.  •  Phone . . . Cambria 90-Y-11

HOME OF TRUMODES & BACAS—PRODUCING MODERN DESIGN CATTLE—THE KIND YOU’D LIKE TO OWN!
Selling at Denver
NATIONAL WESTERN POLLED HEREFORD ASSOCIATION
DEC. 7-8-9
These two prospects pictured and 3 more of the same type and breeding...

PPHR Mischief Real 86th sired by PPHR Mischief Real 3rd and from a Mischief Real Dam was champion bull at the Sioux County Fair, won his class at the Niobrara County Fair and was 3rd in class at the strong Wyoming State Fair this past season all in strong open competition. This prospect has been used in our herd, his first calves show great promise and are 100% polled.

PPHR Real Caldo 2nd the first calf sired by our junior herd sire PPHR Bocaldo Real 2nd and out of a Mischief Real Dam. We believe you will especially like this youngster for his mellowness, smoothness and thick, deep quarters.

ALSO SELLING —
PPHR Mischief Real 117th by PPHR Mischief Real 24th a half brother to PPHR Realetta 9th Champion Heifer at the Niobrara County Fair and 1st place summer yearling heifer at the Wyoming State Fair.

PPHR Mischief Real 112th by PPHR Michief Real 3rd a half brother to our junior herd sire PPHR Bocaldo Real 2nd, both being out of one of our good producing cows Miss Trailblazer 22nd.

PPHR Real Caldo 3rd another good son of PPHR Bocaldo Real 2nd and a half brother to PPHR Real Caldo 2nd, a good burly bull with smoothness and thickness.

PODOLAK POLLED HEREFORD RANCH
FRANK, ALICE, RONALD, JANICE
LUSK, WYOMING
orders will result. Some operators like to use oats or a mixture of oats and beet pulp to start their calves. This is a good practice because these feeds are light, bulky-type concentrates and there is less danger of digestive disturbances during the early stages of the feeding period with these feeds.

After the calves are on feed or are nearly on feed one can begin slowly to substitute other concentrates into the ration. This slow process of changing to a more concentrated feed also has the advantage of adding variety to the ration as the feeding period goes on, which is a help in keeping the animals on feed. At first the animals are fed mostly hay, but as the concentrates are increased the roughage portion of the ration should be correspondingly decreased so that the calves on full feed will be getting about 60% concentrates and 40% roughages.

**Gradual Increase.** A good method of taking stock on feed is to feed about one pound of concentrates per head per day the first day, and raise the concentrates about ½ lb. per head per day thereafter until the animal is on full feed. If the calves do not clean up all of their grain, take it out of the trough before the next feeding and feed a little less at the next feeding. This is especially important if cooked barley or any wet feed is being used. Sour feed will, at times, throw the animals off feed.

In keeping animals on feed there are quite a few things to consider, and it is here that such sayings as "not the feed but the feeder" take on real importance. Some points to keep in mind in keeping animals on feed are these:

1. Any changes in the ration should be made slowly.
2. Feed only what the stock will clean up in an hour.
3. Make use of rolled grains, especially in the final stages of the feeding period.
4. Feed twice daily at first and then increase to three times when on full feed.
5. Use some highly palatable feed such as molasses, or add 10 lb. of cooked barley per 100 lb. of feed.
6. Other palatability factors such as certain drugs like Nux Vomica (a strychnine compound) or Fowler's Solution (an arsenic compound) are sometimes used in small amounts. However, these drugs may be harmful, especially to the reproductive organs, and until more research work is done with them, their use is not generally recommended.
7. Be as regular as possible with the time of feeding.

**Exercise Important.** Another point which should be stressed in the production of sale animals of high quality both in the sale ring and the breeding herd of the buyer, is adequate exercise. Range bull buyers especially look for an animal with some size and muscle rather than just a large fat animal. The latter type is what will be produced with too much confinement.

A good practice is to keep the cattle in during the day and allow them to have access to a pasture or a run at night. Another good practice that is used frequently is to feed 10-15 head in a small pasture or run about 200 yards by 50 yards in size until the last part of the concentrate feeding period, and then switch to keeping them in during the day and turning them out at night.

By paying close attention to the feeding of the calf and its exercise from early in its life right up to sale time, you can be reasonably certain, provided that you have good stock to begin with, of producing desirable sale stock which will not fall down on the job when placed in the buyer's herd.

**Suggested Ration.** A suggested ration which has been found to be good in finishing sale animals is given below. It is recognized that other variations of this ration would probably give equally good results.

**Concentrate Finishing Ration**

<table>
<thead>
<tr>
<th>Feed</th>
<th>Pounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rolled Barley</td>
<td>215</td>
</tr>
<tr>
<td>Rolled Oats</td>
<td>100</td>
</tr>
<tr>
<td>Rolled Corn</td>
<td>200</td>
</tr>
<tr>
<td>Orange Pulp</td>
<td>130</td>
</tr>
<tr>
<td>Molasses Dried Beet Pulp</td>
<td>130</td>
</tr>
<tr>
<td>Wheat Bran</td>
<td>125</td>
</tr>
<tr>
<td>Linseed Oil Meal</td>
<td>50</td>
</tr>
<tr>
<td>Molasses</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>1000</td>
</tr>
</tbody>
</table>

*Minerals are provided in the form of steamed bone-meal and stabilized iodized salt. Roughage should be a good legume or grass legume mixture.

---

**At the NATIONAL WESTERN POLLED HEREFORD ASSN. Show & Sale, DEC. 7-9**

**Denver, Colorado**

**BUY ROBINSON'S**

**MABEL MISCHIEF II**

a 2-year-old daughter of G. ADVANCE PRESIDENT. Safe in calf to a half brother of the Foley Farm bull, Polled Modest Lamplighter. Polled Modest Lamplighter sired the heifer that topped last season's National Western Polled Sale, selling at $10,700, high of all time for a Polled Hereford female. Mabel Mischief II is really a choice individual—a herd-building female selling safe in calf. Take her home with you. You'll be proud of her and her offspring.

**Also selling . . .**

- One good, blocky, heavy-boned yearling bull, sired by MONARCH MISCHIEF and from a LILAC MISCHIEF dam.
- Pen of 3 select, rugged, yearling range bulls.

**F. L. Robinson and Son**

Kearney, Nebraska
MORTGAGE LOANS
If you need mortgage financing, here's where to get considerate attention to your special needs, and prompt action. In your area is a representative of the Connecticut Mutual who is capable and experienced with problems like yours.

Correspondents
- WARD D. ARMSTRONG
  For California and Nevada Loans
  111 Sutter St., San Francisco, Calif.
- C. A. SAINT
  458 So. Spring St., Los Angeles, Calif.
- EWART W. GOODWIN
  First Nat'l Bldg., San Diego, Calif.
- HORACE A. DRYER
  519 Corbett Bldg., Portland, Ore.
- STERLING HEBBARD
  For Arizona Loans
  Hotel Adams Bldg., Phoenix, Ariz.
- FREDERICK P. CHAMP
  For Idaho, Utah and Wyoming Loans
  Utah Mortgage Loan Corp., Logan, Utah
- ELBERT W. ANDERSON
  For Montana, Wash. & N. Idaho
  Vermont Mortgage Co.
  W. 910 Riverside Ave.
  Spokane 8, Wash.
  or write directly to
  H. MARTIN TENNEY
  Second Vice Pres., Mtg. Loans

POLLED HEREFORDS
A few growthy, well bred bull calves for sale. Same stamp that made our State Sale consignment popular.
Luther and Eva Patterson
519 E. Honolulu St., LINDSAY, CALIF.

POLLED HEREFORDS
Bulls and Heifers for Sale
P. G. POYNOR
Rt. 1, Box 218
Escalon, Calif.
Murphy Forty Road
Phone Stockton 2-1807

Polled “A Few of the Best”
Herefords
JOHN E. RICE
Sheridan, Wyoming

POLLED HEREFORDS
500 to 600 per year for sale
225 yearling heifers this year.

Roberts Loan & Cattle Co.
Box 1098
Roundup, Montana

QUESTION of the MONTH

“How Important Do You Consider
The Selection of Your Herd Re­placement Females? How and
When Do You Pick Them?”

ED WRIGHT, Lakeview, Ore.: As
any stockman knows, it is easier
to go backward than forward in breeding livestock. Therefore, the successful breeder must be forever on his toes in selecting, as well as caring for, his cattle. And I think selection is important in a commercial herd, just as in a purebred one.

We sell calves, so we must select our replacement heifers while they are still on the cow. While we are bringing them in from summer range we pick the largest, best-honed and best-marked heifer calves. The cows from which we choose the replacement heifers must also be our best broad cows.

We have only been in a position to practice this the last three years, but if we are lucky in obtaining the right kind of bulls we are sure we will soon have a better herd of cows.

WILLIAM H. GUSCETTI, Loyal­ton, Calif.: I consider this a very important topic. I select at three different periods: first as calves; second, as yearlings; and third—the most important—after the cow’s second calving. This last culling is to eliminate any cow that does not give enough milk to raise a good husky calf.

The December Question

“What do you consider, through your own experience or observations, the most important development or developments in the livestock business during the past 10 years?”

Send your answer along with a photograph of yourself to “Quest­ion of the Month.” Please limit answers to not more than 300 words.

LANE COUNTY WINNERS—This group, above, posed after the 4-H fat stock auction held by the Lane County Fair, Eugene, Ore., Sept. 20. L. to R.: Bernelt Fitch, grand champion; Keith Simons, reserve champion; Betty Woodworth, grand champion: Charon Hill, grand champion, and Allene Wheeler, reserve champion. L. to R. back row: H. Brownfeld Hendrickson, assistant auctioneer; Terrell McKenzie, reserve champion; C. H. Fisher, buyer; Delbert Hill, buyer; Kenneth Danstrom, auctioneer; and Foster Anderson, buyer.
Reclamation—
Mechanical Brush Clearing Reduces Hazards of Burning
By REUBEN ALBAUGH
Extension Specialist in Animal Husbandry University of California, Davis
and
A. E. WEBER*
Farms Advisor, Glenn County, California

RECLAMATION of brushland through mechanical means has proved to have the following advantages over some of the other methods:
There is a reduced fire risk because the debris accumulated mechanically can be burned successfully when the general fire hazard is at a minimum. Stumps, roots and seedlings are for the most part destroyed or removed by this method, thereby greatly reducing the sprouting and seedling growth.
Dicing and working of the soil in the clearing operations incorporate the debris, including weeds, into the soil, providing a cleaner seed bed. The loose mulch left on the soil surface provides an effective coverage for forage seed. Moreover, the working of the soil seems to result in better growth of herbs in the succeeding year.

Disadvantages. Three major disadvantages have been experienced in removing brush by the combination mechanical-fire means. First, it is more expensive than fire alone. The expense depends upon the type of equipment used and the density of brush cover as well as the topography of the area. The mechanical phase of brush clearance has varied in California from $7 to $25 per acre and in some instances has been considerably higher. Some controlled burns have been done by ranchers on private lands for less than $1 per acre, including the cost of preparing fireguard lanes and an estimated cost for standby fire crews.
A second disadvantage is that this method involves a greater erosion risk. Most mechanical methods leave brushland soil in loosened condition and susceptible to accelerated erosion. Where brush is rooted out with bulldozer blades and rippers, the soil is usually loosened and disturbed down to as much as 24 inches in spots. Discing results in loosening the soil to a depth of 6 to 10 inches. Moreover, the bulldozer tracks churn up the soil.
Another disadvantage of mechanical brush removal is that topography is a limiting factor. Only areas where tractors can move may be cleared mechanically.

Dry Before Burning. In Monterey County, California, two general methods of mechanical brush removal are followed. The most popular method is to crush the brush in place by means of a large roller and allow it to dry for several months before burning.
Pushed ahead of a 60-horsepower crawler-type tractor, a 2-ton roller made from a small boiler can roll about 20 acres of brush a day. The cost of this operation runs to about $3-$4 per acre.
After rolling and burning the brush, roots can be removed by using a rotary ripper, heavy disc or heavy disc plow. Monterey County ranchers estimate total costs for rolling, burning and removing roots and preparing the land for seedling amount to around $10 an acre.

Bulldozers Used. Clearing brush with a bulldozer is the most widely used method of clearing. The brush is removed in one operation with a skillfully set bulldozer blade. The object is to remove the brush entirely for later burning without disturbing too much top soil.
Bulldozing brush in Monterey County costs from $7 to $25 per acre. From three to seven acres a day can be cleared by this method, but all of the brush roots cannot be removed by bulldozing.

Discing as another means of mechanical brush removal has been tried experimentally by Forest Supervisor James G. Kaiser in the Mendocino National Forest. He believes this type of equipment, essentially a heavy duty, cut-away tandem disc, will find a place in mechanically reducing brush stands, especially where fire is inadvisable.

*This summary of the authors' findings on mechanical brush removal is taken from "What We Know About Brushland Management in California," a publication assembled by Milton D. Miller of the University of California Agricultural Extension Service.

Vanderhoof Polled Hereford News

WOODLAKE, CALIF.—NOV. 15, 1950

Rancho San Vicente Buys Vanderhoof Polled Females

WALNUT, CALIF.—For the third time, Rancho San Vicente, owned by P. G. Winnett, has made a purchase of registered Polled Hereford females from Vanderhoof Polled Herefords, Woodlake, Calif. This season's purchase has been announced by Robert Van Leuven, superintendent of Rancho San Vicente. The two former purchases consisted of 20 cows and heifers and 5 bulls, each. This sale included 30 yearling heifers and three young herd bulls.

Big Event At Denver

DENVER, COLO.—Another great Polled Hereford event will take place in Denver, Dec. 7-9—the National Western Polled Hereford Show & Sale—drawing consignments and buyers from the entire West.
New Rancher—California Businessman Turns to Montana Cattle

UNTIL six months ago, Boyd H. Gibbons, Jr., was a Ford dealer in metropolitan Los Angeles. Tired of the big city, he decided that he wanted a ranch and a good one. A phone call to R. J. McColl, Ford dealer at Hamilton, Mont., brought him to the Bitter Root Valley to inspect a spread well known as the Ford and Hollister Ranch at Darby.

Located in the upper end of the fertile valley, the ranch lies at the very foot of the snow-capped Bitter Root Mountains and pinnacled Trapper's Peak and looks to the east on the colorful Sapphire range. Gibbons fell in love with the place, its spaciousness, its excellent buildings and its abundance of water. Its potentialities were unlimited. That was April, 1950.

With a preference for Hereford cattle, Boyd went to Curtice Martin, dean of purebred Hereford breeders in the valley and long famous for his rugged Beau Donald cattle. He took an option on Martin's heifers for delivery when the Darby ranch would be his. In the interim, legal difficulties held up the purchase of the ranch and Gibbons returned to California and had to cancel option on the heifers. In the next month, however, negotiations were settled and on June 27 the Boyd H. Gibbons Hereford Ranch was born.

Boys Matrons. Gibbons went back to Martin hoping to find some heifers, but they were sold. He knew then that Beau Donald cattle were for him, and somehow Curtice Martin must have seen in Gibbons the same love of good Hereford cattle which he and his family before him have cherished since 1883.

Martin sold Gibbons a representative group of cows from his breeding herd. Not the tops and not the bottoms, but 20 matrons of an average age of six years. During their time in the Martin herd they had produced 59 calves which sold at an average age of 13 months for a total of $40,150, no one individual selling for less than $500.

The cows were delivered recently, all safe in cold to Beau Donald 641 and Beau Donald 756, grandsons of the famous OJR Royal Domino 10. Ten head of weaner heifer calves also went with the cows.

More Cattle. Another group of good cattle carrying straight Curtice breeding was purchased from L. B. McPadden of Stevensville. To go along with his cows Gibbons purchased the bull, Beau Donald 827, sired by Beau Domino 10. This 2-year-old herd sire had been retained by Curtice Herefords as junior herd sire and the ranch parted with him most reluctantly.

Of the 2,000 acres included in the Gibbons ranch about three-quarters is irrigable. Much reseeding of pasture land and hay meadows must be undertaken for better utilization of the ranch which one day will carry 300 head of registered Herefords.

With an eye for personalized service to the public in his new undertaking, Gibbons has chosen three outstanding employees. Ben Cook foreman, is a native Bitter Rooter. For more than 40 years he has bred good Hereford cattle on his own in the valley. Harold "Happy" Gibson, long in Cook's employ, will act as herdsmen under the tutelage of Curtice Martin. Al White of Darby will be responsible for keeping the wheels rolling on the big ranch.

Four other very important people on Boyd Gibbons' Hereford spread are his wife, Anita, and the children, Joanne, 15; Boyd III, 13, and Patsy, 11.

Montana, now No. 5 in the production and registration of purebred Hereford cattle, has found a new, enthusiastic ranching team in the Gibbons family.
may slow down but they do not depreciate the value of such project.

Some brush burning in the Eshom Valley was done as early as 25 years ago, but most of the progress has been made within the past five years, since public agencies have been working on it. Since 1945 the state laws have permitted the state forestry department to issue permits for controlled burning.

Cooperative Basis. As early as 1944, Keith Manley of Eshom Valley, working with the Tulare County Agricultural Extension Service and the California Division of Forestry, began to formulate plans for controlled burning on a cooperative basis. As a result, two controlled burns were made by Manley, Claude Paregien and A. C. Gabriel. Among others who have been active cooperators are Clarence and Harvey Harrell, Forrest Cooper, W. C. Tarbell, John Brandt, W. I. Bau- man, Frank Snively, Daralen Bauman and Arthur Griswold.

In August, 1946, a test burn was made on the Paregien ranch. A fire guard had been built along one side of the tract, a county road bordered another side and on the third was an old stream bed with standing water in it. About 175 acres were burned over. The atmospheric conditions were not good at the time, the humidity being high that day, and the burn was sketchy. A month later, 1,000 acres were burned over near Eshom Valley on the Manley and the Gabriel ranches. Atmospheric conditions were good at the time, burning conditions were excellent and the results were quite satisfactory. On much of this area the reseeding results have been encouraging.

Rye grass stands at the head of the list of grasses for Eshom Valley and the surrounding territory. Its heavy growth, palatability and ability to reseed are all important factors in its favor. A number of perennial grasses and legumes, such as tall fescue grass, Harding grass, prairie brome grass, alfalfa and sweet clover, have also done well on areas with better soil.

Seed in Ashes. The question of how and just when to seed has received considerable thought. Experience in this area does not seem to indicate any material advantage in seeding immediately after the burn. In some practices in other parts of the state, seeding has been done immediately after the burn in order that the seed might sink into the ashes before they had settled or crusted over.

Best results were obtained where the brush was heavy and there was no native grass. In such cases the burn was good. Even in the sketchy burn, however, the plot referred to in the beginning of this discussion was dense-
OLD SCRATCH
KIRK'S AUTOMATIC LIVESTOCK OILER

OILS THEM where they ITCH!

Just fill "OLD SCRATCH" with waste oil and insecticide, place near your
salt tub and watch your stock rub and scratch killing warbles, lice, flies, mites, 
mosquitoes and insects. "OLD SCRATCH" is also effective in curing skin diseases, warts, and pinkeyes.

"OLD SCRATCH" is a simple machine. No pumps-no jets-no valves, yet has a positive oil-flow adjustment. No brushes to replace and nothing to clog up. Fully automatic, will fit any size ranch animal. The answer to stockmen's prayers. 18 gallon capacity.

BILL KIRK PRODUCTS CO.
915 PIERCE, AMARILLO, TEXAS

EVERYONE WANTS—
SHORTHORN OR POLLED SHORTHORN BULLS!
WE'LL HAVE PLENTY OF THEM IN THE
2 GREAT INTERNATIONAL SALES
HELD IN CONNECTION WITH THE
INTERNATIONAL LIVESTOCK SHOW

100 Shorthorns to be sold Wednesday, November 29 at 9:30 A.M.
40 Polled Shorthorns selling Monday, November 27—1:30 P.M.
in the STOCK YARDS SALE PAVILION, Stock Yards, Chicago, Ill.

The widest selection of the very best Shorthorn and Polled Short­
horn bulls produced ... including bulls that can make profits for the com­
mercial producer ... outstanding candidates for future show ring honors ... 
bulls bred to be great sires ... bulls bred to improve many types of herds. 
Because of the unprecedented demand for bulls we have an especially good
selection to suit a wide range of herds.

All of the females will be in keeping with the usual high quality and are bred to be dependable brood cows when show ring days are over.
They will make excellent foundation females or worthy herd renewing matrons.

* Both the SHORTHORNS AND POLLED SHORTHORNS will be judged for Sale Order on Sunday morning, November 26th.
* SALE CATALOG will be sent only upon written request. Please specify whether Shorthorn or Polled Shorthorn catalog is desired.

AMERICAN SHORTHORN BREEDERS' ASSN.
Union Stock Yards Dept. WLJ
Chicago, 9, Illinois

Practically useless for grazing purposes is this range land in California’s Eshom Valley that has been invaded by brush and digger pine. Ten million acres of brush land in California alone hold out a challenge to reclamation work. Cooperation of all land owners in any given area is considered necessary in a program of burning and reseeding.

Because of the unprecedented demand for short horn and Polled Shorthorn bulls, the annual sale is expanded this year to include 100 Shorthorns and 40 Polled Shorthorns. This will be the largest sale of this character in the history of the Stock Yards sale pavilion.

The widest selection of the very best Shorthorn and Polled Short­
horn bulls produced ... including bulls that can make profits for the com­
mercial producer ... outstanding candidates for future show ring honors ... 
bulls bred to be great sires ... bulls bred to improve many types of herds. 
Because of the unprecedented demand for bulls we have an especially good
selection to suit a wide range of herds.

All of the females will be in keeping with the usual high quality and are bred to be dependable brood cows when show ring days are over.
They will make excellent foundation females or worthy herd renewing matrons.

* Both the SHORTHORNS AND POLLED SHORTHORNS will be judged for Sale Order on Sunday morning, November 26th.
* SALE CATALOG will be sent only upon written request. Please specify whether Shorthorn or Polled Shorthorn catalog is desired.
America's shrewdest cattlemen are seeking the answer to that question. The larger operations. About 8 lb. of ryegrass or mixed perennial grasses are being used per acre. In the locality under discussion, the average rainfall is about 22 inches. There is sufficient topsoil in much of this area to produce heavy crops of feed if the brush can be removed.

How soon will the brush retake the land and make it necessary to start all over again? Paregien believes that good results will be obtained in a 3-year pattern of operation and that with one burn in three years no reseeding will be necessary, since the seed seems to survive the quick burn in a 3-year burning program. Ralph Worrel, farm advisor and enthusiastic advocate of this type of reclamation, showed us a chart which recommends a second burn three years after the first one, then a gap of six to eight years and about every 15 years after that.

Program Will Expand. Considerable expansion of the program is anticipated. It is now established on a firm basis. Many well-supervised test plots are set up to study plant varieties, soil responses, etc. Soil erosion and water run-off are being checked. If the carrying capacity of brush-covered mountain land can be increased from one animal on 80 acres to one animal on 10 or 20 acres, as was estimated by one cattleman with whom we talked, the number of cattle that can be run on California hills will be increased tremendously.

The press of population is moving some farm enterprises out of the great interior valleys. The time may come when the hills will be the cattleman's last stronghold. Should that day come, the only answer is more feed per acre of pasture and more cattle per quarter section of land in the mountain areas. In a thrilling new venture, some of America's shrewdest cattlemen are seeking the answer to that question.

November 15, 1950

--- Advertisement ---

**BRAHMAN CATTLE**

for

- PURE BRED
- CROSS BRED

PRODUCTION

--- Advertisement ---

**Polled Shorthorns**

Largest Herd of Polled Shorthorn Cattle in the West.

**Bulls for Sale at All Times**

**WINONA**

J. W. BENNETT

WASHINGTON

**Mehrtens Shorthorns**

MAKE DOLLARS FOR YOU because they put extra weight on your calves. Try Mehrtens bulls and females.

RALPH W. MEHRTEN

Rte. 1, Box 237, Exeter, Calif.

Can supply cattle from high elevation to sea level from California, 7,000 ft. elevation in Utah or from Washington, Oregon, Arizona.

Best of selections. See me before you buy. Good herd at Elk Grove, California.

Office, Leachman Cow Palace Auction Yards, 14 miles south of Sacramento off Highway 99, at Elk Grove.

--- Advertisement ---

**Old World Sheep and Cow Bells**

Imported from the Basque Country

Delightfully musical . . . roughly shaped . . . made in the age-old tradition of the Basques of Southern France. Most sizes have thong-hung bone clappers, favored for fine tone.

--- Advertisement ---

**CHAS. ADAMS**

REMEMBER . . .

It's the Auctioneer Behind the Auction That Counts!

For Dates Phone

CHAS. ADAMS, Auctioneer

of Vern Sheller—Torrer 5-1201

12555 E. Orangeforpe Artesia, California

--- Advertisement ---

**Calif. Stockmen's Supply Co.**

Owned by CALIF. WOOL GROWERS ASSOCIATION

151 MISSION STREET • SAN FRANCISCO 5
Anaplasmosis—
Destructive Disease May
Be Controlled by Testing

BY DR. H. F. WILKINS
Montana State Veterinarian

Anaplasmosis is a disease primarily affecting cattle and causing greatest loss in adults. It is commonly called yellow fever or yellow jaundice by cattlemen.

Calves may become affected but show little or no evidence of illness, and yet, like all recovered cases, become carriers of the disease through most or all of their lives. Other animals such as buffalo, sheep, goats, deer, antelope and camels may be susceptible, but are not known to show clinical evidence of the disease, or to be a dangerous reservoir of infection.

Anaplasmosis is an infectious, protozoan disease, and may appear in an acute, sub-acute or chronic form. It is due to a microorganism of the blood called anaplasma marginale or centrale according to the location of the parasite in the red blood cell, and it is spread from carrier animals to others by means of surgery, biting insects such as flies, ticks and probably mosquitoes.

Mortality High. In Montana it usually appears in a very acute form with a high mortality rate ranging up to 75%. The customary percentage of death loss ranges from 35% to 50%. This malady appears most commonly during the summer and fall. However, severe losses have been reported during the winter or early spring following a series of operations such as dehorning when the instruments were not thoroughly cleaned of blood and disinfected after use on each animal.

It was first diagnosed and the cause recognized by South African scientists in 1910 and since then has been observed in most countries of the world, including the United States. It was first recognized in the southern states and has gradually moved north until it is now known to exist to some extent in several of the northern states.

At present the number of herds involved in Montana is comparatively small, but the infection does exist and is spreading too rapidly for complacency. Up to this time little could be done other than to isolate and dispose of recovered cases for slaughter as soon as practicable, inasmuch as there was no test by which carrier animals could be identified.

Symptoms. Probably the most pronounced symptom is the yellow discoloration of the skin, udder, teats, brisket, mouth, vagina, sclera of the eye and all visible mucous membranes. Due to the breaking down of the red blood corpuscles the sick animals become very pale and anemic. Urination is frequent and the urine is usually dark in color, but not bloody.

In the early stages of acute anaplasmosis the temperature is high, varying from 103° up to 107°F. The heart action is rapid and noisy, with a metallic ring. Constipation is common and the feces are dark in color, blood tinged and partly covered with mucous. Grunting or moaning is a common manifestation when a sick animal is moved.

Cerebral or brain symptoms are common, and it is very common for the afflicted animals to become excited and get on the "fight." Muscular tremors of the neck, flank and shoulders are oftentimes observed.

Diagnostic Test. During the last year or so USDA’s Bureau of Animal In-
What a Gold Mine is
CK CASCADE
formerly RS True Prince

He is the first son of

WHR DOUBLE PRINCEPS
... we sold in a Denver Sale, back in 1945

*CK CASCADE 4005025*

The CK Ranch bought RS True Prince (CK Cascade) after he had placed fourth in the Senior Bull Calf Class of the open show. He has been making history and money for CK ever since, having sired many of the high-selling bulls and heifers in their sales. Among his more famous sons are Walnut Hill Cascade (Bobby), W. E. Harvey's H Proud Mixer and the CK Ranch's great show and herd bull, CK Cascade 28.

IN THE COMING DENVER SALE WE SHALL OFFER SOME PROMISING SONS OF WHR DOUBLE PRINCEPS AND OF OUR OTHER GOOD SIRES, RS ROYAL BLANCHARD AND LAURELASTER. DETAILS AND PHOTOS OF OUR DENVER OFFERING WILL BE GIVEN IN LATER ADVERTISEMENTS.

Walter and Roy Holland
Owner-Managers

---

Rancho SACATAL
DOS CABEZAS, ARIZONA

November 15, 1950
What does a good bull cost? Not much, according to Ted Chamberlin of Rancho Los Potreros, Los Olivos, Calif. In February of 1945, at the Pacific National Polled Hereford Show & Sale, Chamberlin paid $2,300 for C. Domino President 38th, to breeder P. C. Campbell, Temple, Okla.

He has used the bull five seasons. There are 112 calves on the ground. So roughly the original cost of the bull, spread over these calves, is $20.50 per calf. But what are those calves worth? Even at $250 each, and that’s mighty conservative for registered Polled Herefords, they are worth $28,600. And the bull is still going.

On the basis of these, and figures he has worked out on other bulls, Chamberlin believes that the original cost is not too much of an item when one is considering purchasing a herd bull.

The livestock industry has perfected and used the complement-fixation test as a diagnostic test for the detection of anaplasmosis carriers with a high percentage of accuracy. This is a very complicated blood serum test and must be run in a laboratory. It is essential that the serum be clear and with no breaking down of the red blood corpuscles so as to make the serum red or colored.

All samples will be forwarded to Washington, D.C., for test until such time as the bureau has sufficient antigen to supply our laboratory.

A control program in any herd or community can now be carried out with reasonable assurance of success in materially reducing losses and eventually eliminating the disease. It is recommended that testing be done during the fall, winter and early spring in range herds.

Serious cattle losses occurred in an isolated area a few years ago and the cause was not readily determined because of the distance from veterinarians and because the animals when found were dead and not observed while sick. Finally a sick animal was located and on immediate investigation by the Montana Livestock Sanitary Board, anaplasmosis was diagnosed. Taking into consideration the history, the general consensus of opinion was that previous losses were primarily due to the same cause.

Stockmen Act. During the past two years similar losses have been reported on several ranches and a positive diagnosis of anaplasmosis has been made on two of them. Lyman Brewster, president of the Montana Livestock Sanitary Board, was prevailed upon by the progressive stockmen in the area to call a meeting in order that they may become informed of the disease and the methods of control.

A thorough discussion of the disease and conditions was had and it was recommended that a good representative check test be made, preferably of adult cattle in herds in which unexplainable losses had occurred, and that all cattle be tested in herds in which anaplasmosis had been positively diagnosed.

Carrier animals which are recognized as the principal medium for perpetuating and spreading the disease should be known and so handled as to prevent further spread and loss. Such carrier animals could be sold for immediate slaughter, for introduction into feed lots for fattening, and in exceptional cases, held in isolated pastures where they would not be a source of danger to other cattle during the summer seasons.

It is believed that anaplasmosis can be successfully controlled by repeated tests and by proper handling of carrier animals.
We announce the sale to

LUCKY HEREFORD RANCH

Eugene S. Selvage, owner
Gilroy, California

of 53 Cows and Heifers and 21 Calves
Total – 74 Head – the pick of the

JOAQUIN HEREFORD RANCH

The sale includes 12 daughters of the "Grand Old Master," Donald Domino 26th (pictured above) and the rest are closely related to him through sons and grandsons. These outstanding cows and heifers should further strengthen the already famous Lucky Herd.

JOAQUIN HEREFORD RANCH

Dr. Ned B. Gould, owner
Modesto, California

November 15, 1950
YOU THINK YOU HAVE TROUBLES
Continued From Page 40

turned out to be good beef animals, and those sired by milk bulls are good dual-purpose animals.

Of course, these animals produce meat and milk that in quality and quantity is a far cry from that produced by purebred herds in the U.S. and elsewhere. But in Kenya the demand for milk is as large as that for beef, and the beef doesn't have to be Kansas City corn fed!

Progeny. These progeny of native and European cattle are pretty remarkable looking; they have horns that in some cases would put those of a Texas longhorn to shame, and are all colors of the rainbow. They are larger and heavier than the Boran, but generally retain a slight trace of its hump. The progeny, depending on which set of characteristics is stronger, are bred back to either native animals or European ones. For instance, a strongly Brahman second generation heifer (probably one with a pronounced hump and not heavily boned) would be bred to a European bull.

Hinde says it seems necessary to breed the progeny back to either pure native animals or European ones. For instance, a strongly Brahman second generation heifer (probably one with a pronounced hump and not heavily boned) would be bred to a European bull.

Hinde says it seems necessary to breed the progeny back to either pure native animals or European ones. For instance, a strongly Brahman second generation heifer (probably one with a pronounced hump and not heavily boned) would be bred to a European bull.

Native Labor. A tremendous number of natives is needed to watch the "mobs," make the fence posts (each laboriously chipped by hand out of rock-like cedar), dip 3,000 cattle once a week and to perform many tasks by hand that in the U.S. would be done by machine. Hinde employs more than 200 natives. They get from 10 to 20 shillings a month—a dollar and a half and three dollars a month!

Hinde, however, must build their huts, buy their posho (cornmeal) and supply their meat, usually Impala or bush-buck. Besides that, he and Mrs. Hinde have to act as doctors, confessors and peace-makers. Recently, Mrs. Hinde was confronted by a sick native woman who wanted relief from her malaria. Mrs. Hinde gave her a bottle of quinine tablets, telling her to take three a day until the bottle was empty.

The next day the same woman came back to Mrs. Hinde, this time really very sick—she had taken the whole bottle of pills in one swallow! After the woman had recovered, Mrs. Hinde told her that if she ever did that again her toes would drop off one by one and she would turn bright yellow. She hasn't even had another attack of malaria!

Strong Feed. The feed has such strength and variety in Kenya that the cattle are finished directly off the green grass without any supplementary feeding. Wild red oat does a lot to polish these fat cattle, as does a type of bunch grass called bamboo grass and a creeper variety called star grass. Although the annual rainfall in Hinde's part of Kenya is about 20 inches, it is divided into two periods. This means more green grass over a longer period and undoubtedly helps prevent the necessity of feeding.

The life of a rancher in Africa obviously has its own brand of problems. Particularly disturbing has been the ban on American goods because of the sterling blockade. Apparently the good old American truck is the only one that really stands up under hard work and rough roads (which Kenya has aplenty!).

The day I left the ranch, Hinde had a brand new problem to play with. His beautiful new line fence had just been torn down in several places by a band of giraffes!
REGISTERED HEREFORD SHOW and SALE
DECEMBER 7-8
IN THE NEW $35,000 ARENA — HEATED
WESTERN IDAHO STATE FAIRGROUNDS — BOISE

100 Top Quality Bulls and Females
BRED AND OPEN HEIFERS — HERD SIRE PROSPECTS — RANGE BULLS

DEC. 7th SALE CATTLE JUDGING ............... Harley S. Hotchkiss, Burns, Ore., Judge
DEC. 8th A.M.—OPEN HEREFORD SHOW .......... Art C. Bayers, Twin Bridges, Mont., Judge
DEC. 8th P.M.—HEREFORD SALE ............... Ellis White—Herman Swartz, Auctioneers

ENTRIES FROM TOP HERDS OF IDAHO
GUEST CONSIGNMENTS FROM ORE. and WASH.

—Write For Catalog—

Plan Now To Attend This Great Livestock Show Week

The Capital Show of Idaho — December 5-6-7-8

Association Annual Meeting
7:30 P.M. Dec. 5th

Banquet and Party
7:30 P.M. Dec. 7th

Idaho Hereford Breeders Assn.

SALE COMMITTEE
John Garrett
Virgil Olson
Dal Whiffin

Nelson R. Hull, Pres.
Vera S. Garrett, Sec.-Treas.
November 15, 1950

Si Williams, Mgr.
Ontario, Oregon
Box 808 — Phone 674J
And there are countless other ways as well. Keeping in step with the course of your business, helping you develop and use your credit to your advantage — financing your seasonal needs — and a multitude of things like that are every day routine at your nearby Bank of America.

To bring you good, safe, regular returns on the money you invest in savings — that’s just one of the many ways in which Bank of America is constantly working for you.

And there are countless other ways as well. Keeping in step with the course of your business, helping you develop and use your credit to your advantage — financing your seasonal needs — and a multitude of things like that are every day routine at your nearby Bank of America.

THE WESTERN SHEEP INDUSTRY
Continued From Page 35

expansion of commercial lamb feeding and more use of farm flocks for diversification add to the importance of Western sheep.

Over the past three decades, however, sheep have contributed a declining share of the cash income received by district farmers. Nevertheless, the industry supplied more than $101 million in cash returns to 12th district farmers in 1949. This was approximately a fourth of total U. S. cash farm receipts from sheep, lambs and wool. Since 1925, this decline in cash income contributed by sheep raising has been greater for district ranchers than for the nation’s farmers as a whole.

The accelerated decline in relative earnings of cash returns from sheep in the district during the war and postwar periods has been largely a reflection of the drastic liquidation of breeding flocks, with cattle displacing sheep to a considerable extent as a result of more favorable prices for beef and a less critical shortage of skilled help.

In spite of the downward trend in the ratio of cash income supplied by the sheep industry, absolute dollar returns in most district states in 1949 were higher than in 1925.

Lambs for Income. Of increasing importance to district sheep producers has been the rising proportion of cash income supplied by the sale of lambs. Lambs are sold on a seasonal and highly competitive market.

Although upward trends in the proportion of sheep growers’ income earned by the sale of livestock have been arrested periodically, lamb prices have increased at a much more rapid rate since 1941, and prices received by farmers for lambs last year averaged 136% above the 1941 level while prices for wool were up only 38%. Because of recent rises in wool prices, however, it is likely that wool income in 1950-51 will be higher than in several years.

Of all sheep sold through wholesale channels during 1935-44, about 84% were marketed as lambs. This is in sharp contrast with figures for 1890...
Introducing

NEW HEADS ON CHANDLER HEREFORDS

Combining CHANDLER'S proven flesheing ability, smoothness, depth of quarter with the mating of the unexcelled heads of Larry Domino's.

CHANDLER HEREFORDS

BAKER       OREGON

Herbert     Charles
1000 CATTLEMEN
Can't Be Wrong!

This strongly built, exceptionally well-balanced and designed chute handles cattle with amazing ease, speed and safety. No gates or bars with guillotine action in front to make cattle unwilling to enter.

Operated by One Man
Quickly adjustable for small or large cattle. May be loaded into a trailer or pickup by two men. Every owner is an ardent booster. Please write for further information and prices or stop by the factory and see the chute being made.

LaHUB MFG. CO., Inc.
1732 W. Culver St., Phoenix, Arizona
Phone 3-4336

Remember to Mention
WESTERN LIVESTOCK JOURNAL
When Writing Advertisers

RUPERT'S
JO TONE
Sires of
Royal
Breeding
in service at

Sycamore
Hereford
Ranch
Such as

RUPERT'S JO TONE by College Joe Tone; dam by Maiford Rupert Bst, her dam by Bonnybel.
DIAMOND ROYAL by Baldwin Diamond by Bear Baldwin 1914.
SELECT DOMINO B. 88 by Select Domino.
SUN DOMINO 2D by Brown's Domino 98.
P.H. TRIUMPHAL 10TH by R.S.R. Royal Triumph.

NOW OFFERING
140 YEARLING BULLS
At Ranch, 11 miles east of Farmington, Calif., on State Hi-Way No. 4

W. S. ORVIS
Phone Orvis Toll Station
FARMINGTON - CALIFORNIA
Nelson Bruns, Herdsman of Ranch

which show that 75% of all sheep sold were marketed at the age of four years or older.

Marketing. The seasonal character of range lamb production makes orderly marketing difficult, and because of this seasonal factor a few major packing concerns have become the nation’s principal lamb buyers. Last year major firms bought approximately 81% of all the sheep and lambs slaughtered.

A large share of the 12th district lamb crop is marketed by direct ranch sale and is contracted for some months in advance of delivery, with major buyers following the lamb crop over the district as the season develops. Fat lambs are sorted for delivery to slaughter centers and feeders are sold to Midwest and Pacific Coast feeding areas.

Marketing of district lambs follows an annual pattern determined by seasonal variations. As the delivery of California early lambs declines in June, fat range lambs from southern Idaho’s sheds and shipping areas start to market, followed from July through September by marketings from Nevada, Utah and Idaho and eastern Oregon and Washington. The prewar movement out of this area was primarily eastward, but large increases in Pacific Coast demand have in later years drawn more lambs westward from the Intermountain region—fat lambs for slaughter and feeders for rapidly expanding commercial feedyards.

Consumption. Production of all meats increased sharply after 1940 with a corresponding increase in slaughter. The average production of lamb and mutton from 1938 to 1941 was 892 million pounds. The production of lamb and mutton which accompanied the depletion of sheep inventories from 1942 to 1945 amounted to more than a billion pounds yearly, and the result of this heavy liquidation of stock has been reflected in annual production since 1945, with production declining each year to the 605 million pound output in 1949-43% below the 1942-45 average.

Consumption of lamb has not, like beef and pork, increased with expanded income. Consumption of lamb differs with population groups as well as by geographic location, and consumption is greater by people of Mediterranean extraction.

Although per capita consumption of lamb and mutton has declined sharply in the postwar period, lamb prices in the past few years have remained at high levels largely as a result of short supplies at a time of high consumer income. At no time in the present century has the supply of stock sheep been so influential in maintaining favorable prices to producers. Over the
There's only one BACA DUKE 2d

and only one major source of his blood this season—our ANNUAL SALE, January 8

Above: Baca Duke 2d and admirers—A. H. Karpe; Paul Swoffar, American Hereford Assn.; Alex McDonald, Davis, Calif.; Mr. and Mrs. A. H. Ward, Sedro Woolley, Wash.

A. H. KARPE'S GREENFIELD HEREFORD RANCH, BAKERSFIELD, CALIFORNIA

10 miles south on 99—you'll see the sign on the barn
years, however, producers' prices and stock sheep inventories have not always traveled in such divergent directions.

Beef-Lamb Ratio. Between 1938 and 1946 the average annual price per hundred weight of good and choice slaughter lambs approximated the level of good-grade steer prices on the Chicago market. During this period lamb averaged 96% of beef prices. In 1947 the ratio dropped to 90% and in 1948 to 85%. The high level of lamb prices in the first six months of 1949, during the marketing of the district spring lamb crop, again raised the ratio to 96%. The ratio dropped down to 85% in the last half of 1949, moved up in the first quarter of this year and dropped again.

A number of factors will undoubtedly have a bearing on the relation of lamb and beef prices in the future. Improved breeding and management practices and a sharp increase in commercial lamb feeding have resulted in an increase in the average weight and finish of lambs in the past two decades. A high level of economic activity, population increases and a decreasing supply have helped to maintain an active demand for lamb.

It is difficult to say whether the lower ratios of lamb to beef prices that have appeared in recent years are more than temporary. In view of the limited pattern of lamb consumption, a significant increase in the nation's inventories of both beef cattle and stock sheep during the next few years would place lamb in keener competition with beef. It is possible that under such circumstances the problem in merchandising heavy lamb carcasses might be sufficiently increased to be accompanied by price penalties imposed on heavy lamb carcasses.

Wool. Practically all the wool produced in the United States is suitable

---

You Can Buy This Same Championship Quality In——

PETE RSON BROTHERS HEREFORDS

Consign ment . . .

"GREAT WESTERN" HERE FORD SALE . . .

LOS ANGELES

DEC. 6

11 FEMALES—Outstanding replacement females bred to Larry G. Domino 6th. His calves are sensational.

2 BULLS—Same quality as our pens that sold up to $875 each at the Cow Palace this month. Same as our Los Angeles champion pens in previous years.

Our Champion pen of heifers at the great 1949 Red Bluff Sale. Same breeding, same service sell in our Los Angeles consignment.

DON'T FORGET !—

Our 5th annual Sale — March 8, 1951

Ogden, Utah
Rulon Peterson

100 RANGE BULLS FOR SA L E NOW

PETE RSON BROTHERS

"Herefords of Quality"

Elko, Nevada
Louis Peterson
for the manufacture of clothing or for uses other than floor coverings. The nation is dependent on foreign production for its carpet wool needs and for that reason this type of wool has duty-free access to the domestic market.

Last year the 12th district produced 23% of the nation's total wool clip. Almost three-fourths of the district clip came from California, Utah and Idaho, with California the largest supplier.

The nation's wool growers have long benefited from government aid in one form or another. The principal form of aid has been protection through tariffs on wool and wool imports. In 1816, wool was made subject to a 15% ad valorem duty and almost continuously since that time American producers have had tariff protection that has maintained domestic wool prices at levels higher than the world market and secured a major part of the U.S. market for domestic woolen manufacturers.

Sheep raisers have been keenly responsive to trade policies tending to weaken the competitive position of American wool. Growers were apprehensive over the lower tariff levels implemented by the Geneva Conference in 1948 in accordance with the American policy of cooperation with dollar-short nations, some of which are the world's leading wool producers.

Between Wars. Following World War I, the farm price of wool declined 70% between 1918 and 1921, accompanied by a sharp decline in domestic wool production and consumption. Following imposition of the Tariff Act of 1922 and with a rise in the general level of business activity, flocks were expanded and production rose 40% from 1923 to 1929. Further tariff legislation in 1930 increased the duty and growers attempted to compensate losses in the next decade by volume lamb marketings and by expanding wool sales.

Beginning in 1940, when stocks were relatively low, the demand for wool in the United States for military needs and greater civilian requirements sent wool prices soaring. The average price received by growers in 1940 was 27%
Announcing—

THE SALE OF 16 HEAD OF 1951

SHOW PROSPECTS AND THEIR DAMS—together with a group of TT Prince Wilton heifers and a half interest in FAC Prince Wilton 16th—to BUTLER VALLEY RANCH, Eureka, Calif., owned by G. Lynnwood Speier, a well known lumberman of the north. (His second purchase.)

- ANNOUNCING—a 96½-foot Adobe House under construction now at the Cooper Ranch. (And it won’t even produce a show calf.)

- ANNOUNCING—Good Yearling Bulls for sale, sired by our 1948 Champion, Master Tone 4th.

Watch these good Herefords presented by ALEX LAVIN, show cattle.

Gladys L. Cooper — Tipton, Calif.

Phone 6-9776 Tulare
wool in the United States last year was 29% below 1948, it was still 22% above the 1935-39 average. Production meanwhile was 40% below the prewar average.

As contrasted with the increased production anticipated in world wool producing areas, domestic production is likely to reach a new low as a consequence of a 2.7% drop in the number of stock sheep during 1949. Total domestic production this year, estimated at 2.3% below last year's 70-year low, would seem to insure a favorable climate for the maintenance of prices well above parity.

Current Outlook. The present price support program, under the Agricultural Act of 1949, requires that wool prices be supported at such a level, between 60 and 90% of parity, as to encourage an annual production of 360 million pounds of shorn wool.

The present situation, in view of recent international developments, implies an expanded military requisitioning of worsted wools which are in relatively short supply. The civilian consumption, presently above prewar levels, is supporting a demand for medium grade wool fibers. There is a continuing strong foreign demand for civilian needs and a likely increase in foreign military requirements.

The domestic outlook is for continuing high wool prices with the possibility of reimposition of government price ceilings and the probable rebuilding of the government stock-pile in the event of a more serious world situation.

John Zwald
AND SON
Registered Herefords
FOR SALE
60 Yearling Open Heifers
OAKDALE, CALIF.
Ph. 4641 or 4361

SUNNYBROOK FARMS
REGISTERED HEREFORD BULLS FOR SALE
LOUIS FRANCESCHI
LINCOLN, CALIFORNIA
John Crowe of the Crowe Hereford Ranch at Millville and Bill McDonald, left, holding a Double M Herefords entry from Adams, Ore., fight it out for top honors at the 1950 Red Bluff Sale, while veteran Red Bluff graders, Geo. Hunt, Millville, Shasta County, Yard Shepard of Cal. Poly and Louis Rochford of the Tejon Ranch, are sizing them up.

Watch the graders in action

at the 1951 RED BLUFF BULL
SALE, Feb. 8-9-10

RED BLUFF, CALIF.

For six years, Geo. Hunt, successful commercial cattle operator from Millville, Shasta County, Yard Shepard of Cal. Poly and Louis Rochford of the immense Tejon Ranch at Bakersfield have applied University of California Record of Performance grades to all bulls consigned to Red Bluff.

They have done a grand job. Thousands of cattlemen from Western States have followed them on grade and show day at each Red Bluff Sale.

As each individual bull was given a grade, one of these three speaking over the public address system pointed out the reasons for the grade which they had applied.

Spectators eagerly watched them in action and checked their own grading efforts with the final decision of these experts.

This has been mass education.

For the fine and worthwhile work of these three men, the Red Bluff Bull Sale Committee is extremely grateful.

Chas. Stover, Chairman
Tehama County Cattlemen's Association

For information write:
Bull Sale Committee
Box 687, Red Bluff, Calif.
MEMBERS OF CONGRESS have all been sent copies of the following by Navajo Assistance, Inc., P. O. Box 106, Gallup, N. M., quote:

"To Hon. Oscar L. Chapman, Secretary of the Interior, Washington, D. C. Dear Mr. Chapman: It is noted that pressure is again being brought to bear by communities east of the Continental Divide to take a large share of the San Juan River water to which the Navajos are justly entitled.

"They want the government to construct a tunnel through the mountains so that they can withdraw a large share of their water from them.

"As you know, for many years the Navajos and those who are interested in their welfare and advancement have pleaded for the full use of this water for the benefit of the Navajos. The Navajos need every drop of it, whether it is brought to their land by open ditch or pipe line. Placing this water on Navajo land is one of the main solutions to the Navajo problem.

"The resource development which would provide a livelihood for the largest number of Navajo families is the proposed Shiprock-San Juan irrigation project. South of Shiprock and the San Juan River in the northwest corner of New Mexico is a large area of Navajo tribal land susceptible to irrigation from the San Juan River. The possibility of developing an irrigation project in this area has been under intermittent consideration for more than 50 years . . . The cost of the overall Navajo school building program would be substantially reduced if the Shiprock project were constructed, since it would permit the operation of day schools, which are considerably less expensive than boarding schools to build and operate.

". . . The project could be developed according to any one of three plans . . . Any of the projects will provide a sizeable acreage capable of supporting 2,000 to 3,000 Navajo families in their traditional homeland, and without the serious relocation adjustments incident to moving so large a
We're selling FOUR. Three strong producing young cows bred for March and April calving. Well bred and regular producers, being sold only because we are reducing our herd. One top Larry Domino herd bull prospect that will do someone a lot of good.

**COWS**

- **PH PRINCEPS CHARM** 15th 4424522
  - Colved: Apr. 5, 1945
  - Sire: WHR Princeps Star

- **JR MISS TRIUMPHANT** 26th 4928512
  - Colved: Apr. 9, 1946
  - Sire: TT Triumphant 9th

- **JR MISS TRIUMPHANT** 19th
  - Colved: Feb. 4, 1946
  - Sire: TT Triumphant 9th

**BULL**

- **SR LARRY PRINCEPS** 6108909
  - Calved: Oct. 12, 1949
  - Sire: MW Larry Domino 81

Look them over at the GREAT WESTERN JUDGING, DEC. 5, and buy them in the GREAT WESTERN SALE (at the Los Angeles Union Stock Yards) DEC. 6.

Star Route 1, Box 7, West End Avenue J

A. N. SKINNER
Owner

S. G. HOLBROOK
Manager

LANCASTER, CALIFORNIA

Send for your Copy!

Montana Hereford directory . . .
where to find 'em . . . bloodlines and numbers available . . . sale and ranch information . . .
Write the Montana Hereford Assn., 1148 Harvard Avenue, Billings, Montana. A postcard will do!

REGISTRATION AWARD

BULLS FOR SALE

Rugged coming twos ready for hard work.
Sired by such bulls as—
- **BENEFACTORY DOMINO**
  - by Diamond Domino 30th
- **GIRL GOLD MARK**
  - by PH Golden Bonanza 7th
- **IV REAL PRINCE**
  - by IV Golden Real Prince 8th
- **TILLY'S REAL PRINCE**
  - Sons of Real Prince 37th

HB CATTLE RANCH, Inc. 
Rt. 4, Porterville, Calif.

A. B. Hardin 
Gillette, Wyo.

EXPLANATION—Dr. Fred McKenzie, head of the animal husbandry department at Oregon State College, Corvallis, explains sheep breeding display at 1950 Pacific International. OSC had similar displays on beef cattle and hogs which proved exceptionally valuable to stockmen.

number of families into an entirely new area.

"... Furthermore, apart from any legal right or title that the Navajos may or may not be able to maintain and establish to the storage waters of the San Juan, they as citizens of the United States have an immemorial right to the use of the waters of streams on the reservation, and on the basis of past and present residence in the area they have a higher moral or equitable claim.

"... Without doubt the waters of the San Juan will soon be appropriated for productive agricultural and power use for some group of citizens at a high cost. It is not compatible with American protestations of fair dealing with the Indians to remove them from an area where they have a strong claim to potential resources, only to turn around and exploit these same resources for some other segment of the population. It is not sound planning to force such population shifts.

... In the area which would be included in the Shiprock-San Juan project, the Navajo Tribe has valuable prior water rights. However, continued neglect to develop the right may result in their loss to the Indians. This matter should receive very careful attention in view of the value and importance of water rights on all parts of the Colorado River. Neglect on the part of the government might form the basis of a claim by the Navajos for a large sum of money at some future date.

"... The Navajos are badly in need of all this water. Please make every effort to bring it on Navajo land. Thank you.

Yours very sincerely, Navajo Assis-
LOANS TO CATTLEMEN
ARE AN ESSENTIAL PART OF OUR SERVICE TO
THE LIVESTOCK INDUSTRY . . .

OUR broad experience in Stocker and Feeder Cattle
loans, plus our convenient location—at the gates of the
Los Angeles Union Stock Yards for more than 25 years—
assures you understanding service to suit your needs.

CENTRAL MANUFACTURING
DISTRICT BRANCH OFFICE

Citizens National
Trust & Savings
Bank
Of Los Angeles

A. H. JEHL, Junior Vice President & Manager
C. A. FORD, Assistant Manager
Los Angeles Union Stock Yards
HEAD OFFICE: Spring St. at Fifth, Los Angeles

ESTABLISHED 1890
MEMBER
FEDERAL DEPOSIT INSURANCE CORPORATION
MEMBER
FEDERAL RESERVE SYSTEM

Commercial Herefords on the Tejon Ranch,
Bakersfield, Calif.
SAVE 10% to 25% on protein supplements by using . . .

Promol is a special mixture of Cane Feed Molasses and pure crystalline urea, forming a high protein-equivalent feed for ruminant animals. Nitrogen in the urea is converted into protein by the natural action of micro-organisms in the rumen.

You can feed this protein-equivalent supplement at levels to provide up to 40% of the protein required in any ruminant ration. At the same time, Promol provides the readily available carbohydrates and the palatability of Cane Feed Molasses.

Promol delivers to you at about one-half the delivered cost of protein oil meals. Since Promol can provide 40% of the protein required in a ruminant ration, it can actually save you 10% to 25% on the cost of protein supplements. Write for full information today.

THE PACIFIC MOLASSES COMPANY, LIMITED
215 MARKET ST., SAN FRANCISCO 5, CAL.
Western Distributing Stations: LOS ANGELES HARBOR • STOCKTON • RICHMOND
PORTLAND • SEATTLE • TUCSON

FREE OUR NEW CATALOG = 88
Featuring the famous Fred Mueller Saddles and colorful Stockmen's Supplies—the finest made.

FRED MUELLER, Inc.
10 Mueller Building, Denver 2, Colorado

ARIZONA STOCKMAN
First In Ranch Reading!
Cattle • Sheep • Goats • Horses
$1.50 yr. — 5.00 2 yrs. — 10.00 3 yrs.
Arizona Title Building
128 North First Avenue • Phoenix, Arizona

PIPE VALVES • FITTINGS
New & Reconditioned
Pacific guaranteed, reconditioned pipe is clean, straight, rethreaded, pressure tested to 350 lbs., asphaltum dipped. Economy priced . . . Long lasting.
Write for details and prices

Southwest Pipe Company
408 Falcon Bldg. • San Francisco 9, CAL.

Indians of New Mexico prove their worth in forest fire fighting, as will be
seen by the following. Quote:
"By the Associated Press. The In-
dians of New Mexico are fighting on
fronts a thousand miles apart to save
U. S. national forests.

"A spectacular battle is being waged
by Apache Red Hats from Mescalero
in southern New Mexico. A shock
troop of 19 was rushed to battle a
blaze in Cleveland national forest in
California.

"Eighty-five Navajo workers are
battling the Engleman Spruce beetle
in western Colorado. And, says J. T.
Radel, assistant supervisor of San
Isobel national forest, many will stay
on after others are laid off because the
Indians are superior workers. Radel
says he wants 105 more of the Navajos
and is flying to Window Rock, Ariz.,
to hire them. The Navajos set a record
of treating 17,000 trees in one week.

"The Red Hats are credited with
controlling three of the most violent
fires in Lincoln national forest history.
That reputation brought them to the
attention of the Forest Service nation-
ally. So, when the going got really
tough in the Cleveland forest fire the
Red Hats were hustled to El Paso,
put aboard a DC-3 transport and flown
to San Diego.

"The Red Hats' training started two
years ago under John O. Crow, sup-
erintendent of the Mescalero Apache
reservation. Bert Shields, veteran of
30 years as a reservation ranger, trained
them. Now they are ready to take any
part in the job and are sent to the
hottest points in a blaze. Crow says
they can build and hold a mile of fire
line every half hour.

"Now, you folks who are friends of
our First Americans, please write to
your congressmen and senators, urg-
ing them to vote for some bill that will
give these needy people the water they
so badly need and deserve—and that
is all the water in the San Juan River!
My old-time friend, Charles M. Martin, better known in these parts as Chuck Martin, has in the past written a million words a year of Western fiction for pulp magazines and published numberless books in America, Canada and England, but I was surprised to get a scientific book recently, titled "Monsters of Old Los Angeles," published by the Viking Press, 18 East 48th St., New York 17, N. Y., price $2.50, illustrated by Herb Rayburn, author, Charles Martin.

Chuck Martin has been interested in the La Brea tar pits in modern Los Angeles. Thousands of years ago these pools of asphalt and oil trapped countless animals to their death. Animals and birds mistook the gleam of the oil for water and found themselves mired. Then other creatures, more hungry than cautious, attacked the struggling victims only to be sucked down themselves. This was particularly true in prehistoric times when vast numbers of predatory animals roamed the country. Fossils were first discovered in 1875. Since that time La Brea has proved one of the richest excavation grounds in the world. It is a fine book, well worth the money.

I don't know much about this scientific stuff, so I am going to let you read what the Viking Press said about the story, as follows, quote: "This is a thrilling story of life in prehistoric times. Mr. Martin has written about saber-toothed cats, lions, camels, wolves, vultures, Emperor mammoths and all the other 'monsters' that roamed America 40,000 years ago. These fascinating animals were native not only to the region we now call California, but to all the country. Children of any state can read this book and picture the beasts that raced and fed and killed where homes and cities now stand."

In Los Angeles there are unusually rich deposits of these monsters' fossils. Right in the center of the city, still active and still treacherous, are the La Brea tar pits. During countless years animals mistook the gleam of the oil for water. Going there to drink, they became mired and sank to their death. Predatory animals attacked the...
CARLOT BULL SALE

DEC. 4 - 5 - 6

LARGEST PRIVATE TREATY SALE IN THE NORTHWEST

ALL BREED SALE—BULLS CONSIGNED IN GROUPS OF 3 TO 25—ARE REGISTERED T.B. AND BANGS TESTED

Write Dale Lynch, Sale Manager, for further information

BILLINGS PUBLIC STOCKYARDS

BILLINGS • MONTANA
struggling bodies, only to sink with them. Great numbers of bones have been excavated, many in excellent condition. These are on display in the Los Angeles County Museum. And surrounding the pits are lifelike statues of the animals themselves.

"Mr. Martin lives near Los Angeles and for many years has been fascinated by the pits and the fossils. There have been scientific writings on La Brea, but, as a trained novelist, he wanted to do a simple dramatic story of the monsters as they actually lived. His book has been checked for accuracy by the staff of the Los Angeles County Museum and will be of special interest to young students of natural history. As it is in fictional form, many others will read it as a gripping and unusual tale."

I HAVE A LETTER from my Texas girl friend, Maggie Sims Roberson of Nogales, Ariz. (This remark don't go if that international line rider for Uncle Sam in this fight against foot-and-mouth disease sees it.) Maggie is married to a top-hand cowhand of the regular kind and his name is Otis R. Roberson and he knows how oldtime cowhands feel about women. Well, here is the letter Mrs. Maggie wrote me, as follows, to wit, quote:

"Nogales, Ariz., Sept. 9, 1950. Mr. Frank M. King, Los Angeles, Calif. Dear Frank: I have intended writing you every day since we received your

The table below shows date of birth based on average gestation periods of: Sow 114 days; Ewe 150 days; Cow 282 days; Mare 340 days; Dog or Cat 63 days; Jennet 365 days (not tabulated). Any of these periods may vary several days.

Gestation Table

<table>
<thead>
<tr>
<th>DATE OF SERVICE</th>
<th>COW</th>
<th>MARE</th>
<th>SOW</th>
<th>EWE</th>
<th>DOGS OR CATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 1</td>
<td>Oct. 8</td>
<td>Dec. 7</td>
<td>April 25</td>
<td>May 23</td>
<td>March 3</td>
</tr>
<tr>
<td>Jan. 8</td>
<td>Oct. 15</td>
<td>Dec. 14</td>
<td>May 2</td>
<td>June 7</td>
<td>March 10</td>
</tr>
<tr>
<td>Jan. 15</td>
<td>Oct. 22</td>
<td>Dec. 21</td>
<td>May 9</td>
<td>June 14</td>
<td>March 17</td>
</tr>
<tr>
<td>Jan. 22</td>
<td>Oct. 29</td>
<td>Dec. 28</td>
<td>May 16</td>
<td>June 21</td>
<td>March 24</td>
</tr>
<tr>
<td>Jan. 29</td>
<td>Nov. 5</td>
<td>Jan. 4</td>
<td>May 23</td>
<td>June 28</td>
<td>March 31</td>
</tr>
<tr>
<td>Feb. 5</td>
<td>Nov. 12</td>
<td>Jan. 11</td>
<td>May 30</td>
<td>July 5</td>
<td>April 7</td>
</tr>
<tr>
<td>Feb. 12</td>
<td>Nov. 19</td>
<td>Jan. 18</td>
<td>June 6</td>
<td>July 12</td>
<td>April 14</td>
</tr>
<tr>
<td>Feb. 19</td>
<td>Nov. 26</td>
<td>Jan. 25</td>
<td>June 13</td>
<td>July 19</td>
<td>April 21</td>
</tr>
<tr>
<td>Feb. 26</td>
<td>Dec. 3</td>
<td>Feb. 1</td>
<td>June 20</td>
<td>July 26</td>
<td>April 28</td>
</tr>
<tr>
<td>March 5</td>
<td>Dec. 10</td>
<td>Feb. 8</td>
<td>June 27</td>
<td>Aug. 2</td>
<td>May 5</td>
</tr>
<tr>
<td>March 12</td>
<td>Dec. 17</td>
<td>Feb. 15</td>
<td>July 4</td>
<td>Aug. 9</td>
<td>May 12</td>
</tr>
<tr>
<td>March 19</td>
<td>Dec. 24</td>
<td>Feb. 22</td>
<td>July 11</td>
<td>Aug. 16</td>
<td>May 19</td>
</tr>
<tr>
<td>March 26</td>
<td>Dec. 31</td>
<td>Feb. 29</td>
<td>July 18</td>
<td>Aug. 23</td>
<td>May 26</td>
</tr>
<tr>
<td>April 2</td>
<td>Jan. 7</td>
<td>March 8</td>
<td>July 25</td>
<td>Aug. 30</td>
<td>June 2</td>
</tr>
<tr>
<td>April 9</td>
<td>Jan. 14</td>
<td>March 15</td>
<td>Aug. 1</td>
<td>Sept. 6</td>
<td>June 9</td>
</tr>
<tr>
<td>April 16</td>
<td>Jan. 21</td>
<td>March 22</td>
<td>Aug. 8</td>
<td>Sept. 13</td>
<td>June 16</td>
</tr>
<tr>
<td>April 23</td>
<td>Jan. 28</td>
<td>March 29</td>
<td>Aug. 15</td>
<td>Sept. 20</td>
<td>June 23</td>
</tr>
<tr>
<td>April 30</td>
<td>Feb. 4</td>
<td>April 5</td>
<td>Aug. 22</td>
<td>Sept. 27</td>
<td>June 30</td>
</tr>
<tr>
<td>May 7</td>
<td>Feb. 11</td>
<td>April 12</td>
<td>Aug. 29</td>
<td>Sept. 10</td>
<td>July 7</td>
</tr>
<tr>
<td>May 14</td>
<td>Feb. 18</td>
<td>April 19</td>
<td>Sept. 5</td>
<td>Oct. 11</td>
<td>July 14</td>
</tr>
<tr>
<td>May 21</td>
<td>Feb. 25</td>
<td>April 26</td>
<td>Sept. 12</td>
<td>Oct. 18</td>
<td>July 21</td>
</tr>
<tr>
<td>May 28</td>
<td>March 4</td>
<td>May 3</td>
<td>Sept. 20</td>
<td>Oct. 25</td>
<td>Aug. 4</td>
</tr>
<tr>
<td>June 4</td>
<td>March 11</td>
<td>May 10</td>
<td>Sept. 26</td>
<td>Nov. 1</td>
<td>Aug. 11</td>
</tr>
<tr>
<td>June 11</td>
<td>March 18</td>
<td>May 17</td>
<td>Oct. 3</td>
<td>Aug. 8</td>
<td>Aug. 18</td>
</tr>
<tr>
<td>June 18</td>
<td>March 25</td>
<td>May 24</td>
<td>Oct. 10</td>
<td>Aug. 15</td>
<td>Aug. 25</td>
</tr>
<tr>
<td>June 25</td>
<td>April 11</td>
<td>May 31</td>
<td>Oct. 17</td>
<td>Aug. 22</td>
<td>Aug. 28</td>
</tr>
<tr>
<td>July 2</td>
<td>April 18</td>
<td>June 7</td>
<td>Oct. 24</td>
<td>Aug. 29</td>
<td>Sept. 1</td>
</tr>
<tr>
<td>July 9</td>
<td>April 25</td>
<td>June 14</td>
<td>Oct. 31</td>
<td>Dec. 6</td>
<td>Sept. 8</td>
</tr>
<tr>
<td>July 16</td>
<td>April 30</td>
<td>June 21</td>
<td>Nov. 7</td>
<td>Dec. 13</td>
<td>Sept. 15</td>
</tr>
<tr>
<td>July 23</td>
<td>July 1</td>
<td>June 28</td>
<td>Nov. 14</td>
<td>Dec. 20</td>
<td>Sept. 22</td>
</tr>
<tr>
<td>July 30</td>
<td>July 8</td>
<td>July 5</td>
<td>Nov. 21</td>
<td>Dec. 27</td>
<td>Sept. 29</td>
</tr>
<tr>
<td>Aug. 6</td>
<td>July 15</td>
<td>July 12</td>
<td>Nov. 28</td>
<td>Jan. 3</td>
<td>Oct. 6</td>
</tr>
<tr>
<td>Aug. 27</td>
<td>Aug. 5</td>
<td>Aug. 2</td>
<td>Dec. 19</td>
<td>Jan. 27</td>
<td>Oct. 27</td>
</tr>
<tr>
<td>Sept. 3</td>
<td>Aug. 10</td>
<td>Aug. 9</td>
<td>Dec. 26</td>
<td>Jan. 31</td>
<td>Nov. 3</td>
</tr>
<tr>
<td>Sept. 10</td>
<td>Aug. 17</td>
<td>Aug. 16</td>
<td>Jan. 2</td>
<td>Feb. 7</td>
<td>Nov. 10</td>
</tr>
<tr>
<td>Sept. 24</td>
<td>Aug. 31</td>
<td>Aug. 30</td>
<td>Jan. 16</td>
<td>Feb. 21</td>
<td>Nov. 24</td>
</tr>
<tr>
<td>Oct. 1</td>
<td>Sept. 7</td>
<td>Aug. 6</td>
<td>Jan. 23</td>
<td>Feb. 28</td>
<td>Dec. 1</td>
</tr>
<tr>
<td>Oct. 8</td>
<td>Sept. 15</td>
<td>Sept. 13</td>
<td>March 7</td>
<td>Dec. 8</td>
<td>Dec. 8</td>
</tr>
<tr>
<td>Oct. 15</td>
<td>Sept. 22</td>
<td>Sept. 20</td>
<td>March 14</td>
<td>Dec. 15</td>
<td>Dec. 15</td>
</tr>
<tr>
<td>Oct. 22</td>
<td>Sept. 29</td>
<td>Sept. 27</td>
<td>March 21</td>
<td>Dec. 22</td>
<td>Dec. 22</td>
</tr>
<tr>
<td>Oct. 29</td>
<td>Sept. 36</td>
<td>Oct. 4</td>
<td>March 28</td>
<td>Dec. 29</td>
<td>Dec. 29</td>
</tr>
<tr>
<td>Nov. 5</td>
<td>Aug. 12</td>
<td>Oct. 11</td>
<td>April 4</td>
<td>April 1</td>
<td>Jan. 5</td>
</tr>
<tr>
<td>Nov. 12</td>
<td>Aug. 19</td>
<td>Oct. 18</td>
<td>March 6</td>
<td>April 11</td>
<td>Jan. 12</td>
</tr>
<tr>
<td>Nov. 19</td>
<td>Aug. 26</td>
<td>Oct. 25</td>
<td>March 13</td>
<td>April 18</td>
<td>Jan. 19</td>
</tr>
<tr>
<td>Nov. 26</td>
<td>Sept. 2</td>
<td>Nov. 1</td>
<td>March 20</td>
<td>April 25</td>
<td>Jan. 26</td>
</tr>
<tr>
<td>Dec. 3</td>
<td>Sept. 9</td>
<td>Nov. 8</td>
<td>March 27</td>
<td>May 2</td>
<td>Feb. 2</td>
</tr>
<tr>
<td>Dec. 10</td>
<td>Sept. 16</td>
<td>Nov. 15</td>
<td>April 3</td>
<td>May 9</td>
<td>Feb. 9</td>
</tr>
<tr>
<td>Dec. 17</td>
<td>Sept. 23</td>
<td>Nov. 22</td>
<td>April 10</td>
<td>May 16</td>
<td>Feb. 16</td>
</tr>
<tr>
<td>Dec. 24</td>
<td>Sept. 30</td>
<td>Nov. 29</td>
<td>April 17</td>
<td>May 23</td>
<td>Feb. 23</td>
</tr>
</tbody>
</table>
Two of a Kind . . . . . . . . . By F. L. Sawin

of men are looking after Uncle Sam's business.

"However, you can rest assured that most of them are the real thing. These drug store pretty boys can't take the rough stuff that line riding naturally entails. Most of them have done nothing but push cows and know ranching from A to Z, so naturally they are always looking for the mistakes that most writers that don't know the game make. It's a refreshing surprise to find books written by an old cowpoke that the publishers could not change into gun smoking movie material.

"My husband and I thought we had 'caught you short when we came to your recipe on your 'sour dough bread.' I've got the best sour dough bread man this side of the Pecos, and until we came to the end of it and you said that's the dude's way, and then you went on to give the real old honest to goodness cow punchers' sour dough way complete with that one-inch hard shell of dough around the sides of the containers.

"All of which reminds me of one dishwashing spree that I had one time. I'm still trying to forget it. Why did I bring that up? Anyway, I still have my husband, and I was beginning to wonder if I was going to, that day when I cleaned out his sour dough crock."

SAN JOAQUIN VALLEY Hereford Assn.

SALE featuring
POLLED and HORNED Cattle
TULARE, CALIF.
DEC. 18
Tulare County Fairgrounds
SALE STARTS AT NOON
Good rugged range bulls and also many excellent females—some of them replacement heifers consigned by leading breeders.

CHAS. ADAMS
Auctioneer

SALE features both individual and pen lots — ALL CATTLE will be passed upon by a sifting committee

Banquet night preceding sale

"SAN JOAQUIN VALLEY CATTLE FOR SAN JOAQUIN VALLEY BREEDERS, RANGEMEN AND FARMERS"
your Sophie one of these days. Nothing in California would ever measure up to that. I've traveled over most of the state and have been to the stock yards a number of times but we were always tied up too close for a visit with you. Some time I am going to make a hard try and see if you measure up to the books you put out.

"Gonna quit now and give your eyes a rest. If you ever get back to Nogales again, look us up. The latch string is always on the outside for you and your Sophie. Sincerely, your Texas friend, Maggie Sims Roberson." Unquote.

Thanks a heap, Texas gal, for your fine letter and the best of everything to you and your cowhand husband, Otis R. Roberson, who knows a cowboy recipe for sour dough bread when he sees it and knows how to put that wonderful bread together.

Tests Continued in Search For Suitable Hybrid Corn

Hybrid corn is having a hard time finding its place in California agriculture, although growers are finding that the best hybrids are good enough to make corn a profitable crop in many areas of the state.

Since 1944 more than 100 Cornbelt varieties have been compared with local varieties at Davis and in the San Joaquin delta.

One serious difficulty in developing hybrids better suited to California is their susceptibility to pink ear rot. Until rot-resistant, high-yielding hybrids bred for the state are available, growers must use the best of the available hybrids, according to Francis L. Smith of the University of California College of Agriculture staff.

Indications are that close spacing of the plants and heavy applications of nitrogen fertilizers will aid in obtaining maximum yields. Tests along these lines are continuing at the Davis campus, where nitrogen fertilizer on good soil has increased the average height of plants from 9 feet without fertilizer to 9.7 feet with 50 lb. fertilizer, 9.8 feet with 100 lb. and 9.9 feet with 200 lb.

Speed GERMINATION—promote steady growth with

SPEEDLOC ALUMINUM PORTABLE SPRINKLER IRRIGATION SYSTEMS

EXCEL IN FIELD OPERATION
Twin latch couplings
Risers always remain upright
Ample Contour Flexibility
Maximum Coverage with Minimum Pipe
Quickly—Easily moved
You get more because we put more in it

PACIFIC PIPE COMPANY
409 Folsom Street • San Francisco 5
Please send illustrated SPEEDLOC folder

Name

Address

MAIL COUPON TODAY

November 15, 1950
SELLING AT LOS ANGELES...

Four Outstanding Herd Bull Prospects

2 Sired by MW Larry Domino 83rd (pictured above)
1 Sired by MW Larry Domino 107th
1 Sired by MW Royal Larry

In the past we have sold at Los Angeles outstanding bulls like Jack Haley's register of merit MW Larry Domino 200th, Moseley Hereford Ranch's $25,000 MW Larry Domino 47th, Long Meadow's great breeding bull, MW Prince Dom. A. 13th, etc. We are coming back with the same kind of offering this year. If you need a herd bull with a background of proven prepotent blood, don't fail to see our consignment.

“CHAMPIONSHIP BREEDING AT A PRICE YOU CAN AFFORD TO PAY”

PHOENIX, ARIZONA

MILKY WAY HEREFORDS
They Tell Me...

by Gerry Hall

CLAY PIGEONS KILL HOGS

Think twice before you let someone set up a trap-shooting range on your ranch. Guns and hogs don't mix. The clay pigeons that sportsmen use are highly poisonous to hogs, which gobble them up like they do ashes or charred wood. The poison comes from a coal tar from which the birds are made and there's no cure for it.

HAY CROPS... A new method of handling forage for livestock which conserves the feed and saves a vast amount of labor is chipping the crop in the field. Modern machines for this use are pictured on this page.

STACKED HAY... Every time you see a water soaked or tumbled down 10-ton hay stack you can figure nearly $200 worth of hay is going to waste. Choose a well drained place for the stack. Stack rolled bales closely together, the way cigarettes are rolled and packaged. Top the stack with loose hay and cover with heavy building paper, tarpaulin or roofing material. Maybe we can't do anything about the weather, but we can keep it from taking thousands of hundred-dollar bites out of our $2 billion hay crop each year.

INCREASED PROFITS...

"It should be the aim of every young farmer to do not only as well as his father, but to do his best to make two blades of grass grow where but one grew before." Isaac Newton, commissioner of agriculture, wrote this in his first annual report to President Lincoln in 1863. This should still be the slogan of every rancher to increase profits in 1951.

NATURE PAYS EXTRA DIVIDEND FOR GRASS-LEGUME MIXTURES... Wherever legumes are planted with grass, there's an extra dividend in the form of higher protein hay. The Illinois experiment station reports that tests have shown grass grown with alfalfa contains 80 to 100 lb. more protein per ton than grass grown alone. Grass is usually put into a pasture or hay mixture because it reduces bloating in livestock on pasture and helps to hold the soil better than legumes alone.

IT'S A FACT... Illustrated folder and details about feed mills, with or without molasses mixers, Miller Mfg.

HOW TO FIT, TRAIN AND SHOW CATTLE... Helpful information for shows and fairs. Philip R. Park.

MARKING DEVICES... 100 items for the use of the stockman. Breeders Supply.


LITERATURE ON BUILDING... Dairy barns, hog houses, poultry houses, milk houses and storage cellars. Port.

FILE ON FARM MACHINERY... Uses of hay rakes, mowers, pickup balers, loaders, etc. International.

FREE BOOK ON SUPPLEMENTS... Profitable livestock raising. P&H.

300 ITEMS ON LIVESTOCK... Valuable data on disease prevention. Franklin.

LITERATURE ON ROW-CROP TRACTORS... How to raise your profits. Oliver.

PLANS FOR MAKING YOUR OWN WAGON... Colorful free booklet, Gehl.

CALVES. RAISE THEM RIGHT... Save feed and labor. Pillbury.

WESTLAND PASTURE JOURNAL... Free publication with up-to-the-minute news on pasture. Northrup.

PROFITABLE FORAGE AND COVER CROPS... Booklet on irrigated permanent pasture, Ferry Morse.

STEEL-ALUMINUM BUILDINGS... For cattle, hay, grain and feed are fully described in a new booklet by Butler Mfg. Co.

IT'S A FACT... Illustrated folder and details about feed mills, with or without molasses mixers, Miller Mfg.

SMOOTH—This dive ride seat includes adjustments for comfort of tractor operator and a shock absorber utilizing both fluid and spring assembly to provide a smoother ride. Seat also has a leveling adjustment that enables the operator to adjust it in a horizontal position even when tractor is at an angle.

POWERFUL—This new diesel D4 tractor pulls automatic baler producing 40 to 50 bales per hour. For further information on this new track type tractor, write to Western Livestock Journal.

November 15, 1950

Page 97
Western Livestock Journal's

Horse of the Month

LONG DISTANCE

Owned by Kenmore Stables
San Diego, California
COMPETITION for the consumer's dollar is keen, make no mistake about it. You and I feel it in one way or another every day. These same forces are acting upon the horse business, just as surely as they are on all others. Everyone isn't interested in just one breed of horses. If you have been reading the letters that have been published each week and month, you have become increasingly aware of what our readers want to know about, just as we have.

Between breeds there is competition to attract new owners. That vying for interest is a good thing. It puts all the breeders on their mettle to present their respective breeds in the best light possible. And it makes them breed better horses.

Tennessee Walking Horse breeders and owners are learning these things. Breeders of these horses are most enthusiastic and have attracted many new owners in the past five or six years. During this period the greatest growth in numbers has been in California, with Oregon probably next and Washington taking warmly to these Tennessee Walkers here in the West.

In California, breeders have organized to coordinate promotion of the breed and have established a futurity to encourage owners to take the best possible care in the development of the youngsters. More than that, exhibitors have formed a group to popularize the showing of Walkers. There is still much to be done, but a firm footing is established and the "bench head is secure." You will hear more and more about Tennessee Walking Horses in the West and see them in the shows.

Economists and bankers seem agreed in the present economic structure buying power belongs more to those who have available cash with which to buy commodities, due to the fact that credit controls are slowly squeezing the fellows with lower incomes out of the market for expensive items. That, too, will affect the horse business.

Some of these people who have to make higher payments on automobiles and washing machines will probably not be buying horses.

Perhaps that will change, but it is definite that the great buying power for purebred and registered horses is now, as always, among those who have the land, feed and are really interested in the livestock business. These, then, are the livestock men and women of the West, who have the buying power, facilities and the inclination to raise horses. More than that, many of these people use horses on their ranches. You just don't see ranches without some horses on them and the owners are justly proud of the horses they own and raise.

Despite what a lot of people will try to tell you, these ranch owners are buyers and ardent enthusiasts of all different breeds of horses. Many ranches have several breeds of horses on them. Not a small number of cattle-men are racing enthusiasts. A good many of them have an interest in American Saddle Horses and Arabians. The days of thinking that a rancher has only a fifty-dollar saddle and a twenty-dollar horse are not only over, they're dead. Some of the largest ranch owners in the West are breeders of some of the finest race and show horses. Many of these people also exhibit their own horses. Horses are a business and a pleasure with them.

HORSE OF THE MONTH

A S Horse of the Month for our third annual Tennessee Walking Horse issue we present Long Distance, owned by the Golden Stables developed by M. H. Golden Construction Co., San Diego, Calif.

This liver chestnut stallion stands 15.2 hands, has white points, and was foaled Aug. 7, 1940. He is a son of Yellow Jacket by Last Chance by Hunter's Allen by Allan F-1 and out of Patsy's Rambling Lady by Curlee's Spotted Allen by Roan Allen by Allan F-1.

He was purchased by the Golden Stables in the Fall of 1947 from Steve Hill of Tennessee, subsequent to his show career in Florida where he won 31 blue ribbons in Walking Horse classes.

His son, Toll Call, was named champion of the California Tennessee Walking Horse Breeders Assn. annual show, winning the Harlinsdale trophy at Pomona, Calif. This is the third year that an entry from the Golden Stables has won this weanling championship.

Photo by Coomer

TWO BIG REASONS make careful feeding of brood mares essential during the winter.

1. Unborn foals make three-fourths of their growth during the last three months before birth. Unless the mother-to-be gets enough vitamins, minerals and proteins to feed two bodies adequately, the teeth, bone structure and general health of both mare and foal are bound to suffer.

2. Natural feed is poorest and sunshine is scarcest during the winter. Therefore balanced supplemental feeding is most important then.

Check the mare's teeth. Decay is an indication that the mare's ration is not good enough for the double body-building job demanded of it.

Insurance for Both

YOU CAN BE SURE your mares and foals are getting the perfect balance of all the nutrients they need, when you feed Pillsbury's Best Horse Feed.

Pillsbury's 80 years of feeding know-how guarantee the top quality of every ingredient. Finest oats for body warmth... minerals for sound bones and teeth... molasses for appetite and gentle laxative effect... these and the other ingredients of Pillsbury's Best Horse Feed are your best insurance of balanced nutrition for mare and foal alike.

WE OFFER $25 for letters used in this column. Send me your ideas on management, feeding and breeding.

GLOBE MILLS (Trade Name)
PILLSBURY MILLS, INC., Los Angeles
A cloud of dust hides a big log Carl Arnold is using to train Mark for steer busting.

Carl Arnold—

the Buckeye Steer Buster

LAST July when 52-year-old Carl Arnold charged down the arena after a big, rank steer, the old-timers, and younger ropers, too, sat up high in their seats or in their saddles. The veteran steer buster was on a new horse! And he had chosen the Laramie Plains steer roping for the 1,180-lb. gelding's big-time debut. Breezy came through in the same style that steer roping fans had come to expect from the horse Carl Arnold rode at these events for the last quarter of a century.

The cow country's top steer ropers were at Laramie, and Arnold, mounted on Breezy, placed second in a field that included mostly youngsters less than half his age. Arnold's average was a little over 25 seconds on five steers. His second tie down was in 17 flat!

This slim, slight little Buckeye, Ariz., cowboy has been tying steers down for nearly 30 years in the toughest, most exacting event on any rodeo program—1-man steer jerking. He's probably won more money at it than any other man in the sport's history. And he is still winning. Very few men manage to stay in condition and keep the stamina necessary to contest in top flight competition for so long.

Arena Event. Steer busting, or jerk down steer roping, was the natural consequence to the old time cowboys' custom of holding a "tournament" after the fall roundup. This event became a regular feature of the first rodeos. It was, in fact, very often the only event. Wild-eyed cull steers were corralled near the head of the cow town's main street, which became the arena. The best steer ropers from each outfit would compete for small cash and merchandise awards. Side bets, of course, were customary and often for stakes well beyond 'the wagerers' means—even as today.

Everything went well as long as the steers ran down the center of the dusty streets, but once in a while one would cut loose through the strung out gallery of spectators and charge through the flimsy front of some store or shop.

Steer busting, as the popularity of rodeos increased, became an arena event but also became illegal in most states except Oklahoma and Oregon. Throughout the years a few kept at it, however, competing annually at the famous Pendleton Roundup and the Cheyenne Frontier Days. It was at the latter that Carl Arnold won his first bigtime money in 1930. He'd been competing for about six years before that. Almost every year since then he has given a good account of himself at these affairs, winning first in 1945 and again in 1947.

Private Matches. In between he's sandwiched a number of private matches—for stakes and purses from $2,000 to $10,000—that have made him famous wherever cowboys gather. The Please Turn to Page 123
Walking Horses—

Interest in Breed Shown
By Growth of Western Assn.

By DR. CARL BISHOP
President, Pacific Coast Walking Horse Breeders' Assn.

THAT Westerners are definitely interested in the Tennessee Walking Horse is shown by the growth of the Pacific Coast Walking Horse Breeders' Assn., which now totals 734 members after being organized for only 13 years. Purpose of the association is to further the breed on the Coast and to join persons interested in these animals.

Two new projects were decided upon by the board of directors this year. The first is a contest to select the Pacific Coast champion Walking Horse, which would eventually compete in the national celebration at Shelbyville, Tenn. Second on the agenda was a California Walking Horse Breeders' Futurity to stimulate breeding activity on the Coast.

Membership in the association has been centered so far in Central and Southern California, and it is in this area that most of the group's activities take place. Promise of greater membership looms in other Coast states, however, as is shown by the following breakdown: Arizona, 117 members; Washington, 97; Oregon, 50; and Idaho, 31.

Point System. Eight national horse

WESTERN WINNER—Merry Doughboy, owned by Ray Rhoads, Pomona, Calif., was declared tops in selected competition by the California Walking Horse Breeders Assn. at eight shows within the state. Using these shows as the basis, the horse winning the most points is declared Pacific Coast champion and will compete at Shelbyville, Tenn., Walking Horse celebration each year. The honor this year went to Merry Doughboy, winner of the open class and stake at the Bar-O-National; stallion-gelding and final stake at Del Mar; Walking Horse stake at Santa Barbara; open class and stake at Reno, Nev.; stake at Santa Ana and reserve champion at Los Angeles County Fair, Pomona, Calif.

Photo by Trapp

Monarch

TWHA 440644 PHRA 5888 PHA 3415

A Parade Horse
A Walking Horse
And a Great Sire

Truly one of the most aristocratically bred Tennessee Walking Horse stallions in the West, Monarch traces to 13 foundation sires that appear 33 times in his pedigree. He is a son of Golden Moonbeam and out of Willie B. Gold, a Palomino, by Barker's Moonbeam.

As a parade horse he has attracted unusual attention this year, not only for his beauty, but his attractive walk and good disposition.

He will stand to a few approved mares in 1951. Please book your mares early.

G. W. Abernathy
Arcadia, Calif.

November 15, 1950
shows on the Pacific Coast have been chosen for championship competition. The following point system is used:

- $1,000 Stake: 1st place - 9 points
- 2nd place - 6 points
- 3rd place - 3 points

- $500 Stake: 1st place - 6 points
- 2nd place - 4 points
- 3rd place - 2 points

- Open classes: 1st place - 3 points
- 2nd place - 2 points
- 3rd place - 1 point

This system gives the same ration of credit, depending on the importance of the show or exhibition. Shows chosen were the Riverside County Fair, "Bar O" National Horse Show, San Diego County Fair, San Bernardino National Horse Show, Los Angeles County Spring Fair, Orange County Fair, Santa Barbara National Horse Show, and the Los Angeles County Fair. These shows were well attended and the 1950 season was the most successful the Tennessee Walking Horse has had on the Pacific Coast to date. The standings of the top six competitive horses at the close of the season are as follows:

<table>
<thead>
<tr>
<th>Owner</th>
<th>Horse Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merry Doughboy</td>
<td>Ray Rhoa</td>
</tr>
<tr>
<td>Sara Piedmont</td>
<td>Dr. Elsie Yarbrough</td>
</tr>
<tr>
<td>Merry Charles Wilson</td>
<td>Skyway Ranchero</td>
</tr>
<tr>
<td>My Choice Blond</td>
<td>Earl Lane</td>
</tr>
<tr>
<td>A tie between:</td>
<td>Kenmore Stables</td>
</tr>
<tr>
<td>MacAllen's Sensation</td>
<td>Evergreen Ranch</td>
</tr>
<tr>
<td>Pasean Walking Dream</td>
<td>Evan Manning</td>
</tr>
</tbody>
</table>

On the social side three membership dinners were held in connection with the larger fairs—the Riverside County Fair, the San Diego County Fair, and the Los Angeles County Fair. These meetings were combined business and social affairs.

**Officers.** President this year is Dr. Carl R. Bishop. Other officers are Kenneth H. Golden, first vice president;
Golden, chairman of the horse show committee, organized and managed the Futurity. It was decided that any stallion registered in the Tennessee Walking Horse Breeders’ Assn. of America and foaled in California was eligible for nomination upon payment of $15. Judging was held at the Los Angeles County Fair at Pomona in late September, and both the first place colt and the first place filly were California bred.

The championship award went to the colt, which also copped the Har­


Stable: Kenmore Stables Kenmore Stables Skyway Ranchero Skyway Ranchero Mrs. Aline Terwilliger Leroy H. Grannis Dr. Earl J. Hansch John E. Wilks


Stable: W. E. Evans Evergreen Ranch Evergreen Ranch Evergreen Ranch Evergreen Ranch Aesl. L. Bogue

HERE ARE SOME OF THE BOYS WHO WEAR

WRANGLER WESTERN JEANS

GERALD ROBERTS World Champion All-Around Cowboy 1948

BILL MCGUIRE World Champion Steer Wrestling 1949

MARRY TOMPKINS World Champion Bull Riding 1949

CASEY TIBBS World Champion Saddle Bronc Riding 1949

BILL LINDERMANN Runner-up to World Champion All-Around Cowboy 1949

These titles are based on ratings of the Rodeo Cowboys Association.

These are just a few of the top rodeo stars who wear WRANGLERS.

Blue Bell WRANGLERS are tough and rugged—and comfortable. They’re made of heaviest 11-oz. Sanforized denim. They fit right when you buy them, and keep on fitting no matter how often you wash them. Men’s and boys’ sizes—zipper or button front.

Blue Bell’s new, form-fitting women’s WRANGLER is designed for trim, athletic figures in sizes 12 through 20.

The WRANGLER is the only popular-priced Western jean styled by Rodeo Ben. Like Blue Bell’s Western Jacket, it’s guaranteed the best made, best fitting you can buy, or your money back!

WORLD’S LARGEST PRODUCER OF WORK CLOTHES BLUE BELL, INC., GREENSBORO, N. C.

November 15, 1950
Arabs Bloom at Pomona

A

N exceptionally beautiful display of Arabian horses paraded before the grandstand at the Los Angeles County Fairgrounds, Pomona, Calif., Oct. 7 and 8, during the 6th Annual All Arabian Horse Show. Warm, dry weather was welcome to visitors and the horses showed to particular advantage with a glowing sun being reflected by their shimmering coats.

All along the line there was noticeable improvement in this show. Arab owners are learning their lessons about getting their horses in shape to show to best advantage. More horses are showing "show horse" manners and an increasing number of exhibitors are trying to present their horses to the judge in the best light by better showmanship.

More than 250 horses were on the grounds to compete in breeding and performance classes, and the competition was tough. The mature stallion class boasted 32 entries that gave Judge Col. Norris L'Abbe, Kelseyville, Calif., a head-scratching job. Several other classes had from 14 to 24 entries that made choosing the ribbon winning horses a close decision that depended on special likes of the judge in balancing Arabian characteristics and body conformation in his mind, to make his choices.

Top Stallion. After winning the mature stallion class Sunday morning, El Nattall, sired by A11a Amarward, owned by Mr. and Mrs. George Whitcomb, Riverside, was picked as top stallion of the show over Farnur, by Nyr-Ed-Dam, owned by Donald Jones, Porterville, winner of the 3-year-old stallion class.

In the championship spot for mares Col. L'Abbe picked the popular grey mare, Fersara, by Ferseyn, owned by Mr. and Mrs. Frank McCoy, Huntington Park. She won the 3-year-old class. Ez Zuhra, by Nast, owned by Byron White, Downey, was placed in reserve championship position after winning the mature mare class.

For the grand championship of the show the nod went to Fersara, a beautiful model, acclaimed by many capable judges as one of the best of the breed showing in the West today. Reserve grand championship went to the stallion, El Nattall.

Futurity Classes. Yearling and 2-year-old futurity classes were small and because of lack of adequate entries, the 3-year-old futurity class was scratched. Jesalat Du, sired by Hasarip, owned by Louis W. Dunn, Glendale, won the yearling class over Samara, sired by Ankar, owned by Jean Leinninger, Temple City, with Gazi, sired by Abu Farwa and owned by Donald Weaver, Fullerton, third. In the 2-year-old futurity, Ezite, sired by *Witez II, owned by Julius Kahn, Jr., Canoga Park, was picked for first with Ghezala, by Abu Farwa, owned by Leland McKeel, Whittier, second and Witeza, by *Witez II, owned by Guy Williams, Artesia, third.

Tamaam, by Ferseyn, owned by E.

By BILL SMALE

Fersara, held by Owner Frank B. McCoy, Huntington Park, Calif., won Pomona grand championship, defeating champion stallion for the honor. Awarding trophy, at left, Dr. E. Morris, Kellogg Foundation, Battle Creek, Mich., Mrs. Frank McCoy and Col. Tim McCoy, Hollywood.

Photo by Stewart

Page 104
RESERVE CHAMP — Farnur, 3-year-old Arabian stallion owned by Donald Jones, Porterville, Calif., was made reserve champion stallion at the All-Arabian show at Pomona, Calif., after he won his class. He was also class winner in the hackamore event of the show. Photo by Williamson

D. D. Doutt, Van Nuys, won the under-yearling colt class with Lhasa by Rocky owned by Leland Mekeel winner of the filly event. The open yearling colt class was won by Fa-Kaar, by Ankar, owned by C. L. Wagstaff, El Monte, with the filly event going to Haseyna by Fesrey owned by Ed. Engleman, Whittier.

Zitez, winner of the 2-year-old futurity, won the open colt class with Fariskn, by Rasik, owned by Donald Jones, Porterville, taking the filly event.

Half-Arab Events. Large classes filled the ring in many of the half-Arabian classes held Saturday morning, but here quality and uniformity were not as prevalent as with the pure-bred classes, though a definite improvement in type over past shows was visible. Lack of conditioning held back

WINNING FILLY — Ez Zuhra, 4-year-old grey mare owned by Byron T. White, Downey, Calif., won her class and went on to become reserve champion mare of the All-Arabian Show at Pomona, Calif., in early October. Photo by Williamson

4th Annual Roundup of Western Christmas Cards for 1950
FEATURING A CHRISTMAS THEME WITH A WESTERN BACKGROUND

These cards are again all new and different than previous year’s offerings. The simple holiday message makes them adaptable for anyone. Sample message—“With many good wishes for Christmas and the New Year.”

BEAUTIFUL CARDS IN FULL COLOR ON HIGH-QUALITY PAPER

PRICE LIST

<table>
<thead>
<tr>
<th>Cards</th>
<th>Plain</th>
<th>Imprinted</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>$2.00</td>
<td>$2.50</td>
</tr>
<tr>
<td>50</td>
<td>3.50</td>
<td>4.00</td>
</tr>
<tr>
<td>100</td>
<td>5.75</td>
<td>7.00</td>
</tr>
<tr>
<td>200</td>
<td>7.50</td>
<td>11.00</td>
</tr>
</tbody>
</table>

For orders of over 200 please write for price list.

NO C.O.D. PLEASE

P. O. Box 493, Fort Collins, Colorado
Lazy R.L. is endorsed by the Fort Collins Chamber of Commerce.

LEDDY'S
for Custom Boots & Saddles

LEDDY BOOT & SADDLERY
2455-B North Main, Fort Worth, Texas

November 15, 1950
Ray Rhoads
Los Angeles County Fairgrounds
POMONA, CALIF.

Trainer of Champion Walking Horses

Merry Doughboy  MacAllen’s Sensation
T.W.H.B.A. 443165  T.W.H.B.A. 480146
1950 Pacific Coast Walking Horse Champion
1950 Pacific Coast Junior Champion

FOR SALE
This spectacular 2-year-old show mare with a brilliant future can be seen at Rhoads Stables, L. A. County Fairgrounds, Pomona, Calif. Make your reservations early.

Managing mares now for 1951 season.

For Pleasure or Show
You Can Buy No Better than a Walking Horse

MISSING?
WESTERN LIVESTOCK JOURNAL cannot follow you if your new address is missing from our files. If you plan to move soon, send your change of address today!
By NICK GULASTRA

This display of Arabian stallions was presented at the All-Arabian Horse Show at Pomona, Calif., Oct. 8, exemplifying the family line of Gulasta, owned by Howard Marks, Tracy, Calif., shown at far right in photo. From right to left, next to the sire, are Rahas, owned by Hearst Ranch, San Simeon, Calif.; Rabiyas, owned by Donald and Charles McKenna, Claremont, Calif.; Abu Farwa, owned by H. H. Reese, Covina, Calif.; Tamarlane, owned by John Flowers, Puente, Calif.; and Tamarif, owned by Robert E. James, Burbank, Calif.

Mitchell of Petaluma, won the parade horse class with Basa, owned by Thomas W. Hintz, Tracy, second. Trasik, owned by D. V. Whitmore, Visalia, was third and Rassoul, owned by Larry Duff, Calistoga, fourth. A. E. Cameron's Barq from Highland was called out winner of the pleasure horse class with Raazar second, Bari third and Farnur, owned by Donald L. Jones, Porterville, fourth.

In the hackamore event it was Farnur picked for first over Barq with Courier from the California State Polytechnic College third and Open Sesame, owned by E. A. Seymour, San Francisco, fourth. Raazar won the trail horse class over Farnur with Abu-nirah third and Damascus, owned by Charles and Donald McKenna, Claremont, fourth. Figaro, owned by Fred Arth, won the Arabian native costume class with Fad Zarka second.

One of the highlights of the show, the naming of the winners of the Arabian colts offered as prizes, brought a surprise. Little Jan Murphy who came all the way from Amarillo, Texas, to see the show after winning the colt naming contest, drew her own name out of the box to win the 2½-year-old Arab gelding donated by Donald Jones, Porterville, C. F. Percey, Fillmore, won the 1950 colt foal donated by H. H. Reese, Covina.

OWN San Diego way "Pancho" Kibbee and his wife, daughter and well known mother, Gladys Kibbee, are well set up at their new home in Mission Valley. "Pancho" has worked hard building the horse barn, designed much of it himself and has several innovations you will be interested in seeing. He made hay racks from old pipes held in place by counter-sinking them into two-by-fours. The hay is kept upstairs and grain can be put in each stall through a little door. Manure is thrown out a back door of each stall, so the alleyway is always clean. A wash rack and tack room are in the center of the barn, one on each side of the alley, to complete the facilities.

Kenneth Golden reports interest in Tennessee Walking Horses, with sales stronger this year than last. The new Kenmore Stable is in Mission Valley, but the brood mares are still kept at the Gautay ranch.

Leo Demers is still interested in horses, but doesn't have as many as he used to. He and Mrs. Demers had quite a stable of show horses before the war, you'll remember. He reports that there is more interest in horses by juniors and a few good Walking Horses For Sale

M. H. Golden Construction Company's

KENMORE STABLES

JIM ROWAN, Mgr.-Trainer
309 Camino del Rio, Mission Valley

SAN DIEGO, CALIF.
Attendence is probably not the most important part of a horse show, but to the man showing there is nothing like having lots of people present to applaud the winners and see the results of the months of preparation it takes to get horses ready for the ring.

At Fresno there was lots of hand-clapping and interest in halter classes, working events and races. It was the second show held in this central San Joaquin Valley city, and the repeat performance showed that the first show had tickled the curiosity of the ticket-buying public.

Oct. 20 to 22 were three days jam full of Quarter Horse activity for those at the fairgrounds. In breeding classes, Dr. Darrell Sprott, Killeen, Texas, had his work cut out for him, particularly in the mare classes. He gave comment and constructive criticism in the classes that made his judging more clear and more fully appreciated by the horsemen.

Winners. Starting with foal classes on Friday, he worked up to the junior champions and found Little Egypt, sired by Texas Dandy, from Finley Ranches, Gilbert, Ariz., his choice for the top filly award, with Diamond Ginger May, sired by Silver King, owned by Double Diamond Ranch, Reno, Nev., in reserve spot. Little Deck by Quarter Deck, owned by D. R. Wilder, Santa Cruz, Calif., got the stallion consideration for junior champion, with Camelot Little Cuero by Cuero, owned by Camelot Square A Ranch, San Luis Rey, Calif., reserve junior champion.

Light classes for junior geldings gave little competition for G-Fern Monte Reed by Joe Reed II, owned by Helen Chappellet, Reno, Nev., picked junior champion over Sierra Pepper sired by Silver King, owned by Rancho Sierra Vista, Camarillo, Calif.

Choosing the top horses in the more mature classes gave Judge Sprott even more of a work-out, and before the day was over he had placed 325 head of Quarter Horses in their respective classes. For senior champion mare Red Champion Stallion—Buzzie Bell H., sired by Daybreak, owned by Harold Hutson, El Monte, Calif., was judged grand champion stallion of the fall PCQHA show at Fresno, Calif., in October. This 3-year-old was reserve grand champion at the spring PCQHA show this year as well as reserve at Prescott, Ariz., show in 1950 and Phoenix, Ariz., show in 1949. Harold Hutson is at the halter. Photo by Potts

JUDGE—Dr. Darrell Sprott, Killeen, Texas, explains placings in class during the PCQHA show at Fresno, Calif. Dr. Sprott gave concise reasons in each class for his placings which brought much favorable comment from horsemen and spectators. Photo by WLJ

Bobbie Reed, sired by Joe Bob and owned by Gordon Wheeler, San Juan Capistrano, Calif., was called out with another Wheeler entry, the recently purchased Hualmo by Geronimo, set in for reserve senior champion. These two were also picked this way for the grand championship for mares. On the stallion side, Buzzie Bell H., sired by Daybreak, owned by Harold Hutson, El Monte, Calif., winner of the 3-year-old class, was picked senior champion over Quick Sand by Popcorn, owned by Cotton-Peake, Visalia, Calif., winner of the mature stallion class. This was also the way he put his grand champion ribbons.

Large Classes. Gelding classes in the more mature ages were well filled, because many horses were qualifying for calf roping events and working classes and had to appear in breeding classes before they could show. Double Deck by Quarter Deck, owned by Peter Capleit, Aptos, Calif., was named senior champion gelding of the show, with Cloudy Boy by Rock, owned by Hoke Evett, Bakersfield, Calif., reserve champion. Again the mature horses were placed in grand championship spot as they stood for senior champion.

Willbur May's Double Diamond Ranch came in for honors, winning with the get of Silver King, and the get of Catechu, owned by Forrest Homer, Lemon Cove, Calif., was second. Third place went to the get of Joe Barrett, owned by Ferndale Ranch, Canoga Park, Calif.

Louise Fleming, owned by Bill_tickett, Burbank, Calif., accumulated the most points in the working classes, judged for Forrest Homer, to win the...
Cowboy Boots
At the Rodeo, on the Ranches, for Dress or Service,
Western Boots are outstanding. Service, Class, and Style Unexcelled, and fit guaranteed.

Catalogue on Request
Western Boot Co.
164-166 So. Main St.
Tucson, Arizona

WORKING CHAMP—Louise Fleming, daughter of Ed. Echols, won the most points in working events at the PCQHA show at Fresno, Calif., in October and was named grand champion working horse of the show. She is owned by Bill Fickett, Burbank, Jimmie Williams, San Jacinto, Calif., up.

Alessio
CALABASAS, CALIF.
22 Miles N.W. of Hollywood on U.S. Highway 101
FOR SALE
REGISTERED ARABIAN HORSES
Forebred Mares, Colts and Fillies
Raised in the hills above San Fernando Valley
Top Bloodlines at Reasonable Prices
E. E. HURLBUTT, Owner
Ranch Phone: Superior B-874
Los Angeles Phone: Gladstone 2555

KAUFFMAN
Exclusive
New • Improved

PIARIANI—C. B.
FORWARD SEAT SADDLE
with Duraluminum Tree
Extra strong
Extra light
Molded flaps
EVERYTHING for the RIDER

EL CORTIJO
ARABIAN
COLTS FILLIES
Home of Arab Stallions
Rabiyas AHC 1239
Damascus AHC 2366
AT STUD
Charles & Donald McKenna
Box 128
Claremont, California

GELDING CHAMP — Double Deck, sired by Quarter Deck, owned by Peter Caplette, Apts, Calif., was made grand champion gelding of the PCQHA Quarter Horse show at Fresno, Calif., Oct. 20-22. Mrs. Jeanette Wreden, Santa Marguerita, Calif., is shown presenting the award to Led Engleman, Santa Cruz, Calif.

Fresh bog spavin?
“Clear it up fast with ABSORBINE”
says C. W. Pace of Longmont, Colorado

KAUFFMAN
141 EAST 24th ST. NEW YORK
AMERICA’S LARGEST RIDING SHOP

El Cortijo Arabian
EL CORTIJO
ARABIAN
COLTS FILLIES
Home of Arab Stallions
Rabiyas AHC 1239
Damascus AHC 2366
AT STUD
Charles & Donald McKenna
Box 128
Claremont, California

GELDING CHAMP — Double Deck, sired by Quarter Deck, owned by Peter Caplette, Apts, Calif., was made grand champion gelding of the PCQHA Quarter Horse show at Fresno, Calif., Oct. 20-22. Mrs. Jeanette Wreden, Santa Marguerita, Calif., is shown presenting the award to Led Engleman, Santa Cruz, Calif.

SEE YOUR DEALER

Fresh bog spavin?
“Clear it up fast with ABSORBINE”
says C. W. Pace of Longmont, Colorado

KAUFFMAN
141 EAST 24th ST. NEW YORK
AMERICA’S LARGEST RIDING SHOP

El Cortijo Arabian
EL CORTIJO
ARABIAN
COLTS FILLIES
Home of Arab Stallions
Rabiyas AHC 1239
Damascus AHC 2366
AT STUD
Charles & Donald McKenna
Box 128
Claremont, California

GELDING CHAMP — Double Deck, sired by Quarter Deck, owned by Peter Caplette, Apts, Calif., was made grand champion gelding of the PCQHA Quarter Horse show at Fresno, Calif., Oct. 20-22. Mrs. Jeanette Wreden, Santa Marguerita, Calif., is shown presenting the award to Led Engleman, Santa Cruz, Calif.

SEE YOUR DEALER

Fresh bog spavin?
“Clear it up fast with ABSORBINE”
says C. W. Pace of Longmont, Colorado

KAUFFMAN
141 EAST 24th ST. NEW YORK
AMERICA’S LARGEST RIDING SHOP

El Cortijo Arabian
EL CORTIJO
ARABIAN
COLTS FILLIES
Home of Arab Stallions
Rabiyas AHC 1239
Damascus AHC 2366
AT STUD
Charles & Donald McKenna
Box 128
Claremont, California

GELDING CHAMP — Double Deck, sired by Quarter Deck, owned by Peter Caplette, Apts, Calif., was made grand champion gelding of the PCQHA Quarter Horse show at Fresno, Calif., Oct. 20-22. Mrs. Jeanette Wreden, Santa Marguerita, Calif., is shown presenting the award to Led Engleman, Santa Cruz, Calif.

SEE YOUR DEALER

Fresh bog spavin?
“Clear it up fast with ABSORBINE”
says C. W. Pace of Longmont, Colorado

KAUFFMAN
141 EAST 24th ST. NEW YORK
AMERICA’S LARGEST RIDING SHOP

El Cortijo Arabian
EL CORTIJO
ARABIAN
COLTS FILLIES
Home of Arab Stallions
Rabiyas AHC 1239
Damascus AHC 2366
AT STUD
Charles & Donald McKenna
Box 128
Claremont, California

GELDING CHAMP — Double Deck, sired by Quarter Deck, owned by Peter Caplette, Apts, Calif., was made grand champion gelding of the PCQHA Quarter Horse show at Fresno, Calif., Oct. 20-22. Mrs. Jeanette Wreden, Santa Marguerita, Calif., is shown presenting the award to Led Engleman, Santa Cruz, Calif.

SEE YOUR DEALER

Fresh bog spavin?
“Clear it up fast with ABSORBINE”
says C. W. Pace of Longmont, Colorado

KAUFFMAN
141 EAST 24th ST. NEW YORK
AMERICA’S LARGEST RIDING SHOP

El Cortijo Arabian
EL CORTIJO
ARABIAN
COLTS FILLIES
Home of Arab Stallions
Rabiyas AHC 1239
Damascus AHC 2366
AT STUD
Charles & Donald McKenna
Box 128
Claremont, California

GELDING CHAMP — Double Deck, sired by Quarter Deck, owned by Peter Caplette, Apts, Calif., was made grand champion gelding of the PCQHA Quarter Horse show at Fresno, Calif., Oct. 20-22. Mrs. Jeanette Wreden, Santa Marguerita, Calif., is shown presenting the award to Led Engleman, Santa Cruz, Calif.
than he has ever before seen in San Diego County. That should be a considerable help to the horse business. Young horsemen and women grow up to be the stable owners as time goes along.

Mrs. D. F. Fesler has five weanlings at the Bonita Valley Farm at Bonita and two yearlings. They are a good bunch of youngsters and out of top American Saddle mares too. They are, of course, sired by Thibaut Chief. By the way, Jack Wheeler of Laguna Beach, father of Gordon Wheeler, who has been purchasing top Quarter Horses, recently purchased Mrs. Fesler's good, fine harness mare, Thibaut's Dutch Lady.

Arab Show. Guy and Blythe Williams were busy ones managing the All-Arab show at Pomona, Oct. 7-8. It was the largest show they have yet presented and certainly attracted Arabian enthusiasts from all over the country.

R. B. Field, Leavenworth, Wash., was down for the show as were Mr. and Mrs. Kenneth Hall of Oswego, Ore., Dr. C. H. Palmer, Portland, Ore., L. W. Van Vleet, Denver, Colo., and many others.

"Doc" Young, Pomona, Calif., took the 2-year-old fine harness colt, Blazazzell, owned by W. D. K. Gibson, Flintridge, Calif., back to the American Royal this year. Haven't seen the results yet, but will have them soon.

Purchases. Gordon Wheeler, San Luis Obispo, Calif., made two new purchases during the PCQHA show at Fresno. He purchased the Quarter mare Tinka from Jack Pond of Shannon, Calif., and the chestnut Quarter Horse stallion, Red Concho, from J. Ralph Bell, Visalia. The latter horse was just recently brought to California by Ralph Bell from Dodge City, Kans.

Understand that it is now definite there will be a new racing association subsidiary of the PCQHA with a board of directors, a set of by-laws, separate membership and everything, before the new year rolls around. A majority of the directors will be picked from founder members of PCQHA, according to present plans, and the PCQHA president will automatically go on the board. The idea—to promote Quarter Horse racing in California by a group of those primarily interested in racing.

Hyde Merritt has taken up residence at Federal, Wyo., where he will help with the running of one of the Merritt ranches. He formerly was a member of the Western Horsemans staff and managing editor of the Quarter Horse News.
Intermountain Arabs—
Idaho Boasts Fast Growth
In Registered Arabs
By MRS. WARD RULIEN

T
HE Arabian horse, progenitor of all light horse breeds, has invaded the Intermountain area during the past three years in such a way as to form a large arc, extending all the way from the east boundary at St. Anthony, Idaho, near West Yellowstone, down along the mighty Snake River through south central Idaho and then swinging back north through Boise and up until it crosses the state line at Ontario. Just across the river we have Arabs again in Nyssa.

Three short years ago a purebred Arab was seldom seen here; now we Idahoans in the southern part of the state boast 60 purebred animals, not counting the 1950 spring foals. Their ownership is scattered among 20 individuals.

Some of us don't own large, prosperous cattle ranches or maintain sumptuous living quarters, but we still have the horse of our choice, and find that he is a very easy keeper that more than rewards us for his care by his distinctly affectionate personality and willingness to please his owner.

Half-Breds. Outnumbering the purebred Arab is the half-bred Arab. It is also well to point out that while the purebred breeder encourages the breeding of half-bred Arabs from grade mares, he believes that no half-bred colts should be left entire, for only through reproducing the half-bred filly bred to a purebred sire can one begin to approximate most of the Arab characteristics so desirable in a using horse.

Starting at the most easterly end of the arc across Idaho, we find the large band of Arabians belonging to Mr. and Mrs. Dan Linderman, Teton Ranch, Clementsville, Idaho. They have some 20 purebreds, headed by the stallion, Kasmir, sired by Kasim. The Lindermans have recently found a unique manner in which to put their Arabs on the market. Since they also run purebred Herefords they will trade their Arabs for Herefords.

Following the Snake River we find the mare Nafiah by Alla Amarward at St. Anthony, owned by Howard Kelley. Kelley is quite an advocate and a student of Arab families. On down the river one finds a number of Arabs in Idaho Falls. Dr. Phil Graves recently bought Ferquil by Feranas from Charles Reed, Idaho Falls. Also in the same city, Dr. John Hatch owns Alla Hanna by Alla Amarward. This striking chestnut stallion is owned in partnership with Hicks Morris. One of the newer advocates of the Arab is Alban Smith of Idaho Falls who owns the chestnut colt Sharankan by Rantez.

Southward. Still farther south in Blackfoot, Idaho, we find W. W. Smith and his showy chestnut stallion Al Saudi by Ghazi. Still farther down—

The Ralston Purina Company, manufacturers of OMOLENE
... America's Favorite Feed for Horses ... wants you to have one of these New FREE Horse Books.
It has many illustrations by John Mariani, noted artist, and is full of helpful information.

Don't delay. Write for your book, today!

To: Ralston Purina Co., Horse Dept.
1522 Checkerboard Square, St. Louis 2, Mo.

Gentlemen: Please send me the New FREE Purina Horse Book.

Name: ______________________________
Address: ____________________________
City: ________________________________
State: ______________________________

New! FREE!

The PURINA HORSE BOOK
offering
HELPFUL SUGGESTIONS ON
THE CARE AND FEEDING
OF LIGHT HORSES

RALSTON PURINA COMPANY
CHECKERBOARD SQUARE, ST. LOUIS, MO.
The Estate of
CHARLES S. HOWARD
Will Sell by AUCTION
at
SANTA ANITA PARK
Arcadia, California
Monday, November 27, 1950
4:30 p.m.

9 Stallions
Thoroughbreds

68 Broodmares
Thoroughbreds

28 Yearlings

5 Broodmares Will be Sold With
A 1951 Service to *NOOR
3 Times Conqueror of Citation
* This service is transferable to any approved mare owned by purchaser.

For Catalogues and Reservations
Fasig-Tipton Company
3 East 48th Street
New York
Murray Hill 8-1897
Shown is the mare Gurrina, owned by Mrs. Rulien, at the age of 2 years at the Lazy V V Ranch, Van Vleet Arabian Stud, Nederland, Colorado. Gurrina was sired by Rilage.

stream at Pocatello, Fred Bidwell owns a large group of mares headed by his senior stallion, Al Samar by Sahar. Down the line we find Mrs. Veda Reid West at Soda Springs, who owns the chestnut stallion Abu Alla by Abu Farwa and the mare Dartez by Rantz.

At Rupert we find one of the most distinguished of Idaho stallions, Pilot by Trypolis, owned jointly by Earl Bell and Julian Clawson. We call Pilot distinguished because he is of Polish origin and was imported into this country during the last war after he was captured by the American

DECEASED—Zarife, prominent foundation Arabian stallion at the Van Vleet Arabian Stud, Nederland and Denver, Colo., died Sept. 12, just nine days after his last public appearance at the shows provided each Sunday during the summer at the Nederland ranch. Zarife was foaled in Cairo, Egypt, April 30, 1926, bred by Prince Mohamed Aly. He was brought to this country in 1932 by W. R. Brown. Purchased by L. W. Van Vleet in 1938, Zarife sired 76 purebred colts at the famous Van Vleet Arabian Stud.

DECEASED—Zarife, prominent foundation Arab stallion at the Van Vleet Arabian Stud, Nederland and Denver, Colo., died Sept. 12, just nine days after his last public appearance at the shows provided each Sunday during the summer at the Nederland ranch. Zarife was foaled in Cairo, Egypt, April 30, 1926, bred by Prince Mohamed Aly. He was brought to this country in 1932 by W. R. Brown. Purchased by L. W. Van Vleet in 1938, Zarife sired 76 purebred colts at the famous Van Vleet Arabian Stud.
GOLDDUST SHOEMAKER

VERSATILE WALKER—Monarch, registered Tennessee Walking Horse stallion owned by G. W. Abernathy, Arcadia, Calif., has been shown in many of the leading parades this year and has received wide acclaim as a top parade horse. He is a Palomino and is the sire of a number of top Tennessee Walking Horses in the show ring and on breeding farms of the West.

Third Army in Germany. He has found a large court of grade mares in his surrounding territory.

At Twin Falls, two sisters, Helen and Gladys Caudle, are very enthusiastic owners of Arabs. They own a bay stallion, Oman by El Sabok, and have recently acquired a mare and a filly. In addition, they are running a large irrigated ranch where they also raise registered Great Pyrenees dogs and still find time to take an active part in the Intermountain Arabian Horse Assn.

Just across the Snake is Jerome,
WINNING WALKER — Midnight Sun, twice named world’s champion Tennessee Walking Horse at the celebration held each year at Shelbyville, Tenn., is senior sire at Harlinsdale Farm, Franklin, Tenn., owned by A. F. Harlin. Several sons and daughters of this horse have been brought to the Pacific Slope. Photo by Paulette

Idaho, where Willburn and Clayton Turner, father and son, own the young colt Abu Skowronck by Faryn, and also a mare, Bannad by Assurbanipal. The Turners are eagerly awaiting the arrival of their first foal this fall sired by Alla Amarward.

Snake River Stud. Continuing westward and downstream along our arc we find at the Snake River Arabian Stud at Glenns Ferry, Idaho, owned by Dr. and Mrs. Ward Rulien, a young dark grey stallion, Rakiz by Zarife out of Croisedore. Rakiz represents the Egyptian strain through his sire and granddam, Mahroussa, and also his maternal grandsire, Nasr.

Farther downstream and northward, at Boise, the chestnut stallion San Marino by Rifnas holds court to a large circle of mares. The stallion is owned by A. L. Holland who recently purchased four mares and a filly from Mr. and Mrs. Ralph Vanderhoof, San Marino, Calif.

In nearby Caldwell lives Lynn Bower who owns the chestnut stallion Fernadar by Kamil. Both Mr. and Mrs. Bower are active in riding clubs. Nearing the end of the arc across Idaho formed by the Snake River is Payette, where Mr. and Mrs. Ed Bowman own two Arab fillies, Alaza by Alla Amarward and Shamira by Kasmir. The Bowman are well known in the rodeo field and have already shown their fillies at Boise to win the blue and red.

Stock Horse. Just across the river lies Ontario, in Oregon, and nearby is Nyssa and a fine Arabian stallion stock horse owned by Neil Dimmick. The bay stallion Wisok is by Witez II. He enjoys the distinction of being imported by the U.S. government in November 15, 1958.

H. H. Reese Arabian Horse Ranch
Mail Address:
114 South Glendora Avenue
COVINA, CALIFORNIA

TEL. FLEETWOOD 2-2915
Western Union
Covina, California

Location: S.E. Corner U. S. Highway
99 and State Road 39, in West Covina, 10 miles east of Los Angeles.

To Arabian Exhibitors:

The sixth annual All-Arabian Show held at Pomona Oct. 7 and 8, was an outstanding success, in fact the best All-Arab Show ever held in America.

We wish to take this opportunity to congratulate the management and also to thank the many friends that took prizes and made exhibitions with Arbadins of our blood lines.

The list naturally would start with The McCoys and Fersara—then The Whitcombs with El Nattall.


All the above were in the ribbons with their Arabians or took part in the exhibition of the Gulasta line.

The winnings cover champion mare, grand champion of the show, champion stallion, first in get of sire of both purebreds and halfbreds, and second and third in purebreds, as well as 10 first prizes, 8 seconds, 6 thirds and 8 fourths.

Sincerely,
THE REESES

The MORGAN Horse
Ideal for the Trail and Range
Subscribe to the new
MORGAN HORSE MAGAZINE

Newly enlarged and greatly improved with news, pictures and stories. Write for your copy today. Leominster, Massachusetts. Bi-Monthly, $2.50 per year.

Write for a list of western Morgan breeders and a copy of the booklet "THE MORGAN HORSE"
THE MORGAN HORSE CLUB, INC.
90 Broad St. NEW YORK, N.Y.
EL NATTALL
A.H.C. 2885

- Champion stallion of the oldest and largest All-Arabian Show in America, Pomona, Calif., October, 1950.
- Winner of the mature stallion class over 30 entries.
- Reserve Grand Champion of the show.

Also, one of the three entries to win get of sire class for Alla Amarward. El Nattall also won the mature stallion class at the Spring All-Arab Show, held each year in conjunction with the Bellflower, L. A. County Spring Fair. He was also reserve champion stallion at Bellflower.

Of his get, we have a 2 1/2-year-old ribbon winning chestnut stallion and a couple of fillies for sale, at sensible prices. Every one of his get which we have shown has been a ribbon winner, including blues and reserve championships. Write for our folder.

Rancho El Nattall
Mr. and Mrs. George A. Whitcomb
Rt. 1, Box 685 5431 Riverview Drive
RIVERSIDE, CALIF.

PI CHAMP—Jiggs Bailey, owned by Hughie Long, Cresson, Texas, was champion Quarter Horse stallion at the Pacific International horse show held in October at Portland, Ore. The horse also was shown in cutting horse events at Portland and a week later at Fresno, where he placed third in the cutting horse class and won the 4-year-old stallion class in hand.

1945, and was purchased from the Remount by Dimmick. Wisok is a trained stock horse and is used daily on the large spread where Dimmick runs his cattle.

So much for the Arabs found along the Snake River. Not to be forgotten are those which we find "inland," so to speak. Near Sun Valley, Idaho, lives Clarence Tews, owner of a mighty fine little bay stallion, Pomona Abbas by Katar. This stallion lives in the heart of the cattle country and has to demonstrate his endurance when he goes out in the company of a Thoroughbred or Quarter Horse to ride herd or fence.

Further inland we find three new arrivals in the Arabs recently purchased by Drs. Ben and Freda Morgan from the Pettigrew Farm at Muncie, Ind. The Morgans operate a large dude ranch on Sulfur Creek which is accessible mostly by air. For their personal riding horses the Morgans decided on Arabs to carry them safely over the precipitous trails at elevations up to 8,000 feet.

We are proud of the Arabs in our territory of southern Idaho and believe that with a little more time to train them we can put them into active competition with other breeds and make a very good showing. We want to stress the Arab's ability as well as his great refinement of conformation and his unbelievable endurance. His lovable disposition is something one would have to be exposed to personally in order to appreciate it.
There Comes A Time . . .

WHEN A CHANGE IS NECESSARY!

As every livestock breeder knows, the usefulness of a stallion to a breeding program becomes appreciably less when his fillies get to breeding age. Especially is this true when the horse has reproduced himself consistently and with unusual excellence. That is the case with our Omagirto. Though he is young, only six years of age, we feel that his ability can best be used by a new breeder.

That's why Omagirto is For Sale

Registered in the Palomino Horse Breeders of America No. 7129, he is a son of The Magician PHBA No. 2104, by Long Run, a Thoroughbred, and out of the Thoroughbred brood mare Lady Flirt JC 314646, by *Brig O’ Doon.

He has been used as a jumper and a parade horse as well as an all-around pleasure horse. This strong stallion is particularly deep with a strong back and loin, good muscling and clean flat bone.

His color is unusually good, truly golden and his mane and tail white. He has white markings that make him exceedingly flashy.

His colts have been uniformly excellent for us and in 1948, bred to chestnut mares only he had 100% Palomino foals. His record as a stallion is unusual and he is particularly sure in getting mares in foal.

- He sires Nearly 100% Palominos
- He Has true GOLDEN color
- His Disposition is Ideal
- He is thoroughly Trained
- He is a winning Parade Horse
- His Colts are winning Distinction

HE IS PRICED TO SELL TODAY!

Address All Communications to
MARY R. BIRCH
Rancho del 'Otay
Chula Vista, California

November 15, 1950
You’ll Get More Profit
From Raising Top Colts
Sired by a Grand Champion

Book Now to BUZZIE BELL H.
AQHA 16,998
GRAND CHAMPION STALLION FALL PCQHA SHOW

A Top Ribbon Winner
After winning his class at the Fresno PCQHA show Oct. 20-22, “Buzzie” was judged senior champion stallion and then made grand champion stallion of the show. This year he was also reserve champion at Pomona PCQHA show and at Prescott, Ariz., Quarter Horse Show. In 1950 he was grand champion stallion at Shadow Hills, San Fernando, Riverside County Fair and Orange County Fair. Last year he won his share of honors, too. He is shown at right with Fresno grand championship ribbon.

A Royally Bred Stallion
A son of Daybreak AQHA 1426 sired by Silver King by Old Sorrel, “Buzzie” carries the potent King Ranch blood on the sire’s side. Notice, too, that Silver King get won the get of sire at the Fresno Show last month. His dam is a Lucky Strike Bell mare. Here is breeding that not only produced Buzzie Bell H., but has produced many other good, consistent horses for the show ring and the rodeo arena.

Now Booking Mares for 1951 Season

Mr. and Mrs. Harold Hutson
1616 So. Esto Ave.
Phone: Forest 8-2401

EL MONTE, CALIF.
Horses entered in the Santa Anita handicap to be run in early December included such money-winning horses as Gallahadion, owned by Mrs. Ethel V. Mars; Mioland and Kayak II, owned by Charles S. Howard; and Sweepin', owned by H. C. Hill.

The racing string of William Ziegler, managed by Trainer Matt Brady, had arrived at Santa Anita for the winter racing season. The 22 head included 12 yearlings and Our Mat, a stakes winner.

Charles E. Cooper was planning his annual trials for young stock to select racing prospects. The event was scheduled for his Thoroughbred ranch at San Luis Rey, Calif.

Fire had destroyed the barns at the Robert P. Scripps ranch near Miramar, Calif. Six horses were saved, but Buck, a Palomino that had won classes at the Coronado National Horse Show, was destroyed.

Mrs. Vanderbilt Phelps had several Thoroughbreds coming to the front at her Carmel Valley, Calif., ranch, including Cynic Queen, Cynic Miss and Demonax.

Dr. Raoul Esnard had purchased Liberal by *Sickle out of the stakes-winning mare Silk Tassel by Superman and moved him to his REB Ranch at Calabasas, Calif. Other recent purchases included Lazada by Sweeping Away, Torch Peg by Torchilla, La Aurora by *Delman, and Mint Time by Flight of Time.

Two well-bred stallions, *Firozeapore and Kenty, were leading breeding activities at Walter T. Wells' San Fernando, Calif., establishment.

Thoroughbred breeding was attracting much attention along the Pacific Coast. The California Breeders Assn. included such men as Henry Potter Russell, Charles E. Perkins, Charles S. Howard, Carleton F. Burke, Walter Hoffman Jr., Charles E. Cooper, Edwin Janss Jr., Walter Wells and Harry N. Isenberg, all well-known in Thoroughbred circles.

Witchmount, owned by F. W. Haegele, was put into stud at Merle H. Little's Monrovia, Calif., ranch. A strong horse foaled in 1924, Witchmount was sired by Broomstick out of Princess Pandora by Peter Pan.

At Mr. and Mrs. W. C. Gaffers' Placerita Canyon, Calif., ranch Ever Bubbling and Top Row had been placed at stud. Ever Bubbling had already sired such horses as Bubbling Boy, Jessie Cloud, Arthur W., Bubbling Land and Justa Bubble. Dave Pollock was handling the breeding activities, as well as conditioning and handling of the promising colts.

Santa Anita Park was planning its most pretentious program since its opening in 1934 for the 1940-41 season. Charles H. Strub, executive vice-president and general manager of the Los Angeles Turf Club, Inc., had announced that a bonus of 10% of all winnings of California-bred horses in open races would be paid to breeders.

The Turf Club had selected Carleton F. Burke as vice-president and director of racing.

Western Livestock Journal's Horse of the Month was Bon Homme, owned by Charles E. Cooper, Rancho San Luis Rey, Bonsall, Calif. Bon Homme was by Sweeping Away out of Sue Smith by *Masetto. His progeny had so far won more than $1,000,000, and his half-brother was Meridian, winner of the Kentucky derby.

Emerson F. Woodward had entered 33 head from his Valdina Stables at Santa Anita. Topping the list was Saint Andrews II, an English import. Others were Valdina Myth, Selina Stakes winner, and Valdina Gold, as well as many promising yearlings.

Malicious, one-time wonder horse, was making a personal appearance tour at the age of 13 years. He greeted friends from a special stall at Caliente on Armistice Day.

Challedon had arrived in California to attempt to break Seabiscuit's winning record. Challedon had more than $320,000 to his credit already.

---

**Are You Getting What You Want in Your Young Colts?**

- Quarter Horse Muscling
- Working Ability
- Cow Sense
- Foundation Blood
- Quick Speed

**See The Difference With SONNY KIMBLE COLTS**

**Quarter Horses For Sale**

We have a few mares for sale, carrying the service of Sonny Kimble and White Possum. If you want real working geldings ready to go to work stop by and see us.

We have a few registered geldings for sale now.

**SONNY KIMBLE**

P.1649 AQHA

ALSO HOME OF WHITE POSSUM

AQHA 8559

Son of Brown Possum AQHA 16 by Possum by Traveler.

Fee $50 with return.

**Mr. and Mrs. Graeme Stewart**

DORRIS, CALIF.
Both TOP Mares at Fresno
Are From our New Stable

Red Bobbie Reed
GRAND CHAMPION MARE

For the second year, Red Bobbie Reed was named Grand Champion mare of the Fall PCQHA show at Fresno, an honor with real meaning considering the high quality of mares in competition at the show. This permanently registered daughter of Joe Bob out of Miss Redwood will continue to show in competition until we put her in our brood mare band. These are the kind of mares we are picking to raise the best in Quarter Horses.

“QUARTER HORSES AT THEIR BEST”

Hulamo
RESERVE GRAND CHAMPION

Several times earlier in her show career, Hulamo won her class. At Fresno she was picked at the head of her age class and went on to stand next to our Red Bobbie Reed. This is the first time that the same stable has shown the Grand Champion and Reserve Grand Champion mare. We feel it shows the consistency of our program to have uniformly top horses for our show and breeding string.

Our horses also won the exhibitor’s band of mares class; G-Fern Sparkle Plenty stood second in class; Billie Vessels stood fourth in class. We are proud of these winnings because we are interested in the future of the business and in raising Quarter Horses that represent the breed well. We have nothing for sale now, but welcome interest.

Gordon Wheeler
SAN JUAN CAPISTRANO, CALIF.
Q-T-W-C
QUALITY! That's What Counts
Her First Blue Ribbon

G-FERN CINDERELLA JOELA
74 Days Old
Sired by Joe Barrett

At the P.C.Q.H.A. Show at Fresno
350 Entries
Horses We Sold before the Show
WON
Grand Champion Mare; Reserve Grand Champion Mare; Junior Champion Gelding; 4 Firsts, 1 Second.

Joe Barrett's Get Won
1 First, 2 Thirds, 1 Fourth

Ferndale Won
4 Firsts, 2 Seconds, 2 Thirds, 1 Fourth
Scratch Sheet

Saddlebred—

This spring I sold to Barney Briscoe a 2-year-old filly by his horse Ensign Kirby, "Horse of the Month," and out of my mare Denmark's Choice by Pure Denmark.

Barney in turn sold the filly to Mrs. L. A. Ward for a four figure price. He seems to think that under the expert training of Marty Mueller she will really be something when they bring her out next spring. This sale is very gratifying to us who love and raise American Saddlebreds.

Incidentally, I bought my mare some years back through an ad in the WLJ. —Mrs. Walter B. Slinker, Hughson, Calif.

Champion Arab—

Talattaash was judged first in the Arabian senior mares and grand champion mare at both the San Fernando Valley Fair and the Antelope Valley Fair and Alfalfa Festival.

This gave the mare three firsts and three grand championships in three weeks. We are justifiably proud of her record. Joe Campbell, Victorville, Calif.

Doing Horses—

It is my opinion that too many breeders of Quarter Horses have horses that can only be shown in halter classes. In most cases it is quite probably not the fault of the horses. We plan to show that our horses are doing horses, as well as horses to show on the halter. Lyle Christie, Mendota, Calif.

The Best—

The Western Livestock Journal is the best ranch magazine on the market, and I read and subscribe to most of the horse and cattle magazines published. I would enjoy a bigger horse section in the Journal, and I know many of your other readers would too, by some of their letters. Alice Heath, Oakdale, Calif.

Morgan Tribute—

Your splendid tribute to the Morgan Horse in the September number of Western Livestock Journal warms the cockles of my heart and I wish you to know I sincerely appreciate it. C. Fred Austin, Birmingham, Mich.

Easy to Complain—

It is so easy to find the time to sit down to write a complaint, but we sort of neglect writing and saying how good things are. Well, I just wanted to tell you how much we have enjoyed the Horse Department the past few months, for it is a great pleasure to see all different breeds featured equally. We are always quite anxious to turn to the Horse Department every time the Journal comes, sure that it will not be pages of backside views of Percheron ponies and reports of Quarter Hoss sales and shows from beginning to end. It is just right now, none crowded out. Fine job, boy, congrats. Leta Tompkins, Clinton, B. C., Canada.
biggest of these matches were the series of six he had with the late Bob Crosby. Arnold won five of them. His take from the gate alone at one of these matches was $4,512.

In other steer roping matches Arnold has busted 'em down for big chips, too. He beat King Merritt in a 2-match series and did the same to Dick Truitt. Cotton Lee and Toots Mansfield both beat Carl on two separate occasions, but he threw a 22.5 second average on 10 steers at Everett Bowman to win that match with ease.

To account for Carl Arnold's success at one of the most strenuous sports there is, one has to take into consideration several factors. The first is the man himself. He came out to Arizona from Texas as a youngster. He was born in San Angelo in 1898, spent much of his youth around Sweetwater where he cowboayed, rodeoe'd and roped. Until 1925 he rode around New Mexico and Texas, working here and there, winning his share of calf and team tying money at local rodeos. In 1925 he came to Arizona, staying the winter with Art Beloat, rodeoeing the rest of the time in relay events and in calf and team events.

Buys Ranch. Like every cowboy, he longed for a ranch of his own and in 1930 he got started near Buckeye, Ariz. Today he has a big irrigated acreage in grass, alfalfa and begari, a nice herd of cows and a leased desert range in the White Tank Mountains, 10 miles from his home. He's owned the Hat brand since 1931, a rocker with a half circle on top.

But he still finds time to take in the Pendleton and Cheyenne rodeos. He and his family trailer two horses up that way every year. And Carl Arnold

![Carl Arnold has probably won more money at 1-man steer jerking than any other man in the history of the sport. He is shown here with Mark, calf and steer roping and AA running horse.](image)

**NOW Quarter Horses ON EASY TERMS**

*We Will Sell at Auction*

1:00 P.M., Sunday, December 10th, 1950

at our Foothill Ranch, 15835 Foothill Blvd., San Fernando, Calif., 35 Good Quarter Horses, featuring colts by KING BOB, LUCKY BOY and others. Brood mares, using geldings, prospects for breeding, showing, racing, cutting and rodeo use.

We have sold our Sweetwater Nevada Ranch and must reduce our Quarter Horse band. We want every breeder, large and small to have an equal opportunity to buy the excellent colts by our Grand Champion Stallion KING BOB and other horses in the sale. Therefore terms will be available to qualified buyers.

If you ever wanted to be raising Quarter Horse Champions—Here is the opportunity of your lifetime.

1:00 P.M.—December 10th

*Write for Catalogue*

**MULLER BROS.**

*Office: 6380 Sunset Blvd., Hollywood, Calif.  Phone: Granite 41111.*

**Ranch: 15835 Foothill Blvd., San Fernando, Calif.**

**MISSING?**

*WESTERN LIVESTOCK JOURNAL* cannot follow you if your new address is missing from our files. If you plan to move soon, send your change of address today!

**A Good Horse for Cattlemen**

An Arabian stallion makes the ideal cross on grade mares for all 'round ranch or pleasure riding. They produce horses of good size, smart, easy riding, tough and of fast action. We raise the kind of young stallions you like.

**For Ranch and Pleasure Buy ARABIANS**

**JONES ARABIAN RANCH**

903 E. Morton St. Porterville, Calif.
They must have cow savvy and have had expert training. They must be able to "rate" themselves to the speed and course of the animal they are after. They shouldn't just make a headlong dash after they leave the chute. They have to overtake the steer or calf with great speed, of course, but they also have to keep right on him at the right distance through whatever capers the steer wants to cut. This requires Quarter Horse speed, level-headedness and what is called maneuverability, the peak tests of this cow country breed of horses.

Arnold shows his son some of the finer points of roping, using Smoky for practice. Arthur is on another Arnold horse, Mickey, considered a top cutting horse.

still wins money in the steer and calf roping. He stays in condition. Steer busting takes a rugged physique, iron nerves, good wind and a sure-shot eye.

To keep up all these years, long after many of his early contemporaries have retired, Arnold has kept in good physical shape. He trains before a big match by running around his corral on foot! And on the way to rodeos he'll get out of the car and have his wife drive a mile up the road. Then he runs that mile, to keep his wind up!

Arnold doesn't smoke or drink. A small man, going maybe 150 pounds, he's a bundle of sinew and muscle.

Best Horses. Another thing you have to consider when accounting for this Buckeye cowboy's lifetime of top-notch competition is the horses he rides. He has and has always had some of the best in the business.

Good "steer" horses are rare. Arnold says there aren't more than 15 or 20 in the whole country. First of all, "they must be good to rope on."

Passing the Test. After a lot of this routine Arnold mounts without the guide reins and he and the horse rope the log. It is then that this expert says he knows if he's got a steer horse or not. If the horse "feels for the log—getting ready for the jerk, bracing...，“
November 15, 1950

More Proof that TEXAS DANDY
Is a Sire of Show Winners

His Daughter

Little Egypt

JUNIOR CHAMPION P.C.Q.H.A. SHOW

After winning her age class against 25 entries, Little Egypt by Texas Dandy P-2112 out of Jezebel went on to defeat all other junior class winners to become junior champion filly of the Fresno show. She is another example of the quality and type we are getting from our senior sire. She also won her class at Prescott this year, and was Grand Champion Mare at the Bar AA Show at Nogales. If you want this kind, we invite you to the ranch to see our colts.

Buy Quarter Horses That Can Do It ALL.

A Few Colts and Fillies For Sale

FINLEY RANCHES

Where TEXAS DANDY Stands to Approved Mares

Gilbert & Dragoon, Ariz.
Good Poland Chinas—
Tulare County (Calif.) Hog Breeders
Raise Some of the Nation's Finest

By HENRY J. BECKMAN

INCREASED production of hybrid corn and the expanding use of irrigated pastures are factors that will assist swine producers in lowering their costs as swine prices vary, according to Henry C. Jackson, manager of the California Farm Bureau Marketing Assn.

Current demand is for hogs weighing 180 to 210 lb. and dressing 140 to 150 lb. The day of the lard hog is gone and demand for a different type of carcass is quite pronounced.

California breeders, with breeds that fit this demand and with pastures most of the year, enjoy some advantages over Cornbelt producers. Cornfed hogs get too fat even though marketed at lighter weights. This applies both to fresh pork and bacon cuts, according to San Joaquin Valley authorities who are close to the trade. Today's premium is on an animal that does not carry too much finish and is of light weight, although the yield may not be as good on such animals.

Tulare Swine. Some excellent crossbred hogs are now being produced by San Joaquin Valley swinemen, many of them carrying Hampshire blood. Because the Poland China breeders were among the earliest purebred men in the valley, however, there are many hogs that carry some Poland China blood used for commercial feeding. A number of Poland China breeders who have withstood the ups and downs of two decades and all the price variations of two world war periods, are located in Tulare County.

It was back in 1931 that Rollo Bishop of Porterville bought a purebred Poland China gilt and set Clifford Glaves up in the swine business as a club boy. The next year Clifford's father, A. D. Glaves, went into the business with Bishop and began the development of a breeding herd. They remained together for eight years, setting up separate herds in ranches one may see unique features in the Porterville area of Tulare County known as the home of some of the nation's finest Poland China hogs.

Some Answers Are Given
On Hog Feeding Problem

How much feed does it take to produce 100 lb. of live hog? Some answers are given by cost studies made by the California Agricultural Extension Service in cooperation with hog producers. These and records on the University of California herd give the following figures for California.

If hogs are fed concentrate feeds in dry lot, it takes about 500 lb. of concentrates to produce 100 lb. of live hogs in California. These figures are higher than are shown in some feeding tables, because they include an allowance for the feed to maintain the breeding herd.

Pillsbury has always brought you the latest, most scientific developments in livestock nutrition. And now, Pillsbury's Best Pork Producer and Pillsbury's Best Pig and Sow Feed contain one of the greatest advancements of all time...

Another Great New Development in Pillsbury's Best Feeds—
"MYCINS"
add amazing growth power for hogs

"Mycins," the dramatic infection-destroyers, were first used in the treatment of human ills. Then it was proved that these same factors added to swine rations greatly retard harmful bacteria in the systems of growing pigs.

Pillsbury research discovered that a combination of all three "Mycins" (Streptomycin, Aureomycin and Terramycin) gives amazing growth and feeding economy.

And now you get all three at no extra cost in Pillsbury's Best Pork Producer and Pillsbury's Best Pig and Sow Feed. Selected sources of APF supplement supply "Mycins," Vitamin B12 and other important growth factors.

WE OFFER $25 for letters used in this column. Send me your ideas on management, feeding and breeding.

GLOBE MILLS (Trade Name) PILLSBURY MILLS, INC., Los Angeles
Growth and Thrift—
Rapid, More Economical Gains Indicate Value of Pasture in Pork Production

By REUBEN ALBAUGH
Extension Specialist in Animal Husbandry
University of California

ECONOMICAL pork production depends to a large degree on the full utilization of green pastures. This fact has been demonstrated in many places throughout the country. Hogs that are finished for market on green pasture plus proper concentrates and minerals not only gain more rapidly, but also more economically than those that are finished in the dry lot.

Prof. E. H. Hughes, head of the division of animal husbandry, College of Agriculture, Davis, in 1937 established data which showed the value and importance of green alfalfa in a fattening hog's ration. His results pointed out that pigs full fed on such pastures made more rapid gains and more economical gains than hogs fed the same ration but allowed to graze on alfalfa pasture only 4 hours every other week. His work indicated that pigs receive in addition to Vitamin A something out of the alfalfa pasture which stimulates growth and thrift. His work further showed that hogs fattened on green alfalfa pasture did not produce soft pork.

Jan Martinis, Lockwood, Monterey County, Calif., in 1939 found that hogs being full fed on green barley pasture gained more rapidly and more economically than did the same kind of hogs fed the same ration in the dry lot. In this feeding test alfalfa meal was substituted for the barley pasture for the group being fed in the dry lot.

Cost of Gain. Pigs fed on barley pasture gained 2.34 lb. per head per day as compared to the dry lot group's 2.15 lb. of gain in the dry lot. The cost of a pound of gain in the dry lot was $13.14, while among the hogs that did not receive any protein supplement the cost was $11.76. The group of hogs that received a supplement on the alfalfa pasture gained 340 lb. more than did the ones that were not supplemented, but the extra cost gain $56.10 which left a profit of $7.84 in favor of the group that did not receive the protein supplement on alfalfa pasture.

In 1949 Crinklaw conducted another experiment in which he used 50-lb. pigs and green cut alfalfa each day. Both groups of pigs were fed in the dry lot where they received fresh green cut alfalfa each day. The group that was supplemented with protein gained 1.58 lb. per head per day, while the group that received no protein supplement gained 1.02 lb. per head per day. This test ran for 60 days. The cost of 100 lb. of gain in the non-supplemented group was $13.14, while for those that received no supplement the cost was $12.77.

C. M. Vestal and G. O. Mott of Purdue University conducted a test on fattening hogs in 1949 where they compared Ladino clover with alfalfa. Their conclusions were that Ladino clover was superior to alfalfa as a pasture for full fed hogs. The feed cost of a 100 lb. gain on the Ladino clover pasture was $9.35 compared to $10.42 for the alfalfa. They found that hogs could be successfully fattened for $4.50 for the dry lot hogs compared to $3.76 for the group being fed on alfalfa pasture.

Supplements. The group supplemented on pasture with approximately 7% of their feed being fish meal gained 1.75 lb. per head per day, while the group that was not supplemented with fish meal gained 1.58 lb. per head per day. However, in the group that was supplemented, it took 403 lb. of feed per 100 lb. of gain compared to 370 lb. per 100 lb. of gain in the non-supplemented hogs. The cost of 100 lb. of gain in the group that received the fish meal was $14.35, while among the hogs that did not receive any protein supplement the cost was $11.76. The group of hogs that received a supplement on the alfalfa pasture gained 340 lb. more than did the ones that were not supplemented, but the extra cost gain $56.10 which left a profit of $7.84 in favor of the group that did not receive the protein supplement on alfalfa pasture.
market on either Ladino clover or alfalfa pasture without any additional protein supplement. Where the alfalfa was supplemented, the cost of 100 lb. gain was $10.42 compared to $10 even without a supplement. For the group supplemented on Ladino clover pasture, the cost of 100 lb. of gain was $9.35 compared to $9.29 for the group that was not supplemented.

It appears from these data that the efficient swine operator in the future will utilize green pastures to the fullest extent in the production of pork. The only salvation for the inefficient operator is high prices. Scientific feeding will be one of the tools that the future pork producer will use in competing with high costs.

---

**Runt Pig**

*Extra Care Paid Off For This One’s Owners*

It hardly seems possible that the healthy 450-lb. hunk of pork pictured above was once so weak that it had to be fed milk from a bottle. Yet the pig was the runt of her litter, a weakling so frail she was unable to compete with her lively brothers and sisters for sustenance.

But the owners of the Ecker ranch in the Sierra foothills near Coarsegold, Calif., believed that the runt would pay them for their extra care. They brought her into the house, wrapped her in a towel for warmth, and hand-fed her until she was able to fend for herself.

Once able to stand alone, the runt received ordinary care — the table scraps and milk that would otherwise go to waste on the ranch. Soon the runt had caught up with the other pigs in her litter; they seemed to resent the fact that she had lived and fought her in the pen, so she was allowed to roam the barnyard. Now she is too fat to walk very far.

Maybe a runt—if it has the advantage of good breeding—is worth a little extra effort. At least it paid off in this case.—C. M. Blasingame.
Salt and Water Vary With Different Feeds

Experiments indicate that different feeds cause a change in the amount of water and salt consumed by horses, according to Perry T. Cupps, University of California College of Agriculture, Davis.

In one experiment a Percheron filly eating 5 lb. of rolled barley and 21.7 lb. of oat hay daily drank an average of 70 lb. of water and ate 0.34 ounces of salt per day. When the roughage was changed from oat to alfalfa hay, the water consumption increased to 90 lb. per day and the salt to 0.57 ounces. This increase amounts to 28% for water and 67% for salt.

The amounts of roughage fed to the animal were the same so the increased consumption of water and salt was not caused by the different amounts of feed eaten. The environmental conditions were the same in each case.

Several theories have been advanced as to why the water and salt consumption changes on different feeds. Increased amounts of potassium and protein in the different rations have been advanced to change the water and salt consumption of animals. Neither of these appears to be the explanation as far as the horse is concerned. Dried beet pulp without molasses is low in both potassium and protein, yet it also causes an increase in the amount of water and salt consumed.

Pasture for Hogs Cited As Big Factor in Feeding

Pasture is undoubtedly the largest profit factor in feeding hogs for market in California’s Kern County, reports Farm Advisor Peter J. Lert of the University of California Agricultural Extension Service.

One acre of pasture will save from 1,000 to 2,000 lb. of barley and up to 500 lb. of protein supplement in feeding hogs for market, he says. Every pound of meat scraps added to a ration of grain and pasture will save up to 3 lb. of corn. There may be no advantage, however, to adding a protein supplement where the amount of grain fed is limited and pasture is good. After hogs weigh 100 lb., they can be fattened with corn or barley alone.

Corn, where produced, is worth more for pig feeding than any other cereal except wheat. Corn alone is not a satisfactory feed for fattening hogs in dry lot. It need not be ground for hog feed unless it is very hard and dry.

Wheat is worth about the same as shelled corn for pigs but has an advantage of furnishing about 35% more protein.

Ground barley is worth about 93% as much as shelled corn for fattening hogs. Ground barley is produced in California and makes satisfactory and economical gains. It should always be ground.

Boys and Girls You’re Invited

WILDO’S First Annual

Junior Feeder Pig Day
SAT. DECEMBER 10

For all those with projects who want junior feeder pigs to finish for the Junior Cow Palace or for general project work, we will have 200 purebred Durocs for your inspection and purchase. You can pick the pigs you want. This is not an auction, but a day set aside so that you can all come at once and get the pigs you need.

We’ll Be Looking for You!

Cow Palace Bulletin:

Our pen of purebred Durocs went breed champions and were later judged Grand Champion pen of barrows of the show. Our entries also won: 1st lightweight individual Duroc barrow; 1st heavy­weight pen of Durocs; 1st gel of sire barrows—over all breeds; 1st lightweight carlot over all breeds; reserve champion heavyweight carlot over all breeds; 1st lightweight feeder pigs in pen; champion pen feeder pigs.

Our Feeder Pigs are the same breeding as these winners.

WIL-DO DUROC RANCH
WALDO W. WEETH, Owner, COALINGA, CALIF.

Gravel Hill Hampshires
We recently purchased a hard boar, Forward Bound, from the Field & Christensen herd of Nora Springs, Iowa. He is a son of Robin Bound, he a son of Upward Bound, this boar out of a daughter of Mixer Blend.

Homer Davis

Gravel Hill Hampshires
We recently purchased a hard boar, Forward Bound, from the Field & Christensen herd of Nora Springs, Iowa. He is a son of Robin Bound, he a son of Upward Bound, this boar out of a daughter of Mixer Blend.

Homer Davis
INDEX to ADVERTISERS

A
Aceh
Acro-Stack
Acme Oil Co.
Adams, Charles
Adams, L. E.
Albert, Rue
American Aberdeen-Angus Breeders' Assn.
American Brahman Breeders' Assn.
American Century Sugar Co.
American Shorthorn Breeders' Assn.
American Turpentine & Tar Co.
Andis Clipper Co.
Angus Herd
Arizona Stockman
Abernathy, G. W.

B
Bank of America
Bannerman, Frans & Sons
Bean, John, Western Division
Bear Claw Ranch
Bell, Robert
Bennett, J. W.
Bliaggini, Ed.
Billings Public Stockyards
Birch, Mary R.
Blue Bell, Inc.
Blumer, A. M.
Breeders Supply Co.
Brown & Co.
Butler's, Dale, Pasture Mixtures, Inc.

C
California Cotton Oil Corp.
California Wool Growers' Assn.
Canyon Ranch
Cattlerunner Tractor Co.
Caster, H. C.
Chamberlin, Ted
Chandler, Roy
Chandler, Herbert
Chester W. Swine Record Assn.
Citizens Natl. Tr. & Savings
Codial, Henry A., & Sons
Colorado Fuel & Iron Corp.
Columbia Sheep Breeders' Assn.
of America
Connecticut Mutual Life Insurance Co.
Consolidated Chemical Industries, Inc.
Croesus, E. E.
Cooper, Gladys
Cornell Livestock Co.
Crichton Bros.
Cutler Laboratories

D
Dauber Machine Co.
Davis, H. C., & Machine Co.
Davis, Homer
Dawco Corp.
Doty, James, J., Ltd.

E
Evergreen Ranch
Excelsior Carreras Co.

F
Fairbanks, Morse & Co.
Fame Farms
Faith-Tilton Co.
Fane Ranch
Farnam Equipment Co.
Federal Land Bank of Buckley
Fenmore Ranch
Ferry-Morse Seed Co.
Fess, Adolf
Finley Ranches
Firestone Tire & Rubber Co.
Franklin, O. M. Serum Co.

G
General Mills, Inc.
Germania
Goldman, M. H., Construction Co.
Gover Ranch
Great Western Livestock Construction
Gutrides, J. R.

H
Hacienda de Los Reyes
Hamburger, R.
Hamel Bros.
Hardin, A. K.
Hayman, B. C., Inc.
H. B. Cattle Co.
Hidden Valley Angus Ranch
Holley Sugar Co.

I
Iceman's Assn.
Iowa Hereford Breeders' Assn.

J
James Mfg. Co.
Jones Arkansas Ranch
Justin, G. A.
K
Kapre's, H. G., Greenfield Ranch
Kaufman Saddlery
Kinscadr, D., Remedy Co.
Kirk Products Co.
Kitchel, S. B.

L
Laguna Ranch
La Hutt Mfg. Co.
Lazy L Ranch
Leedy Boot & Saddler Co.
Leddy, M. L., Saddler & Boot Shop
Lederle Laboratories, Inc.
Lee, L. D., Inc.
Levi Strauss & Co.
Livestock Supplier Mfg. Co.
Long, Raymond

M
Matao Navigation Co.
Maxwell, Vents Peak
McCoy, Frank
McKenna, Charles & Daniel
McManus Omaha Ranch
Mahar, Ralph
Mallinger, Merle
Malky Way
Miller & Teale
Montana Hereford Assn.
Moore, H. W.
Moore Mfg. Co.
Morford, L. R.
Morgan Horse Club
Morris Salt Co.
Mueller, Fred, Inc.

N
National Cottonseed Products
National Western Potato Hereford Assn.
National Boot Co.
Nob Hait, H. V., & Co.
Northrup, King & Co.

O
Oak Park Ranch
Olson-Stelzer Boot & Saddlery
Orvis, W. S.
O X O Ranch

P
Pacific Coast Aberdeen-Angus Breeders' Assn.
Pacific Telephone & Telegraph Co.
Palmer, Walter
Palomar Angus Ranch
Patterson, J. P., & Sons
Peterson, Mrs. C. V.
Peters Bros.
Phoenix Feed Show
Pillsbury Mills, Inc.
Plymouth Silver Ranch
Podsidla Herefords

Q
Quaker Oats Co.

R
Rain Bird Sprinkler Mfg. Co.
Rallston Purina Co.
Rancho del Eliseo
Rancho Encantado
Rancho Sacatol
Randolph Properties
Red Bluff Salt Sale
Red Oak Ranch
Reese, H. H.
Reid, Silbad
Roper's School of Roping
Rice, John
Riverside A. A. Ranches
Roberts Loan & Cattle Co.
Robinson, F. L., & Son
Rock Ridge Ranch
Rolling Ridge Ranch
Ryan, Charles
Ryan Saddles & Ranch Supply

S
Sager, H. B.
San Antonio Livestock Exh.
San Joseph Valley Hereford Assn.
Sanborn, Homer
Shur-Rane Irrigation Systems
Sierra View Hereford Ranch
Sierra Vista Hereford Ranch
Sinton & Brown Co.
Siskraft Co.
Skinner Ranch
Speckles Sugar Co.
Staley Hereford Ranch
Staf authoritarian Chemical Co.
Stallion Ranch
Stewart, Graeme
Stone Ranch
Sunnybrook Farms
Swift & Co.

T
Thompson, Arthur
Thompson & Gill, Inc.
Turner, Mrs. C., & Co.

U
Union Oil Co.

V
Vanderhoof, Fred
Van Vleet Arabian Stud
Volkman, C. M., & Co.

W
Wallop Herefords
Walton, Earl
Waujaigan Ranch
Wells Fargo
West & Lyon
West &amp; Son
Western Boot & Shoe Co.
Western Mfg. & Supply Co.
White Cloud
Whitcomb, George, Mr. & Mrs.
Williamson, John W., & Sons

Y
Young, Monte
Young, W. F., Inc.

Z
Zwol, John & Son

WESTERN LIVESTOCK JOURNAL
CORNELIUS LIVESTOCK CO.

OFFICES:

LOS ANGELES • PHOENIX • COLEVILLE

CORNELIUS LIVESTOCK CO.

Will Buy Your Livestock

CORNELIUS LIVESTOCK CO.

Will Sell Your Livestock for You

CORNELIUS LIVESTOCK CO.

Will Buy Feeder Cattle for You

CORNELIUS LIVESTOCK CO.

Twenty-six Years Experience in the West

LET US SERVE YOU!

Phone, write or wire:

CORNELIUS LIVESTOCK CO.

SPECIAL!

We'll sell several loads of choice
FEEDER STEERS

Wed., Dec. 6

in the Great Western Feeder Sale at
Los Angeles

LOS ANGELES—UNION STOCK YARDS
Phone JEfferson 8124
Night Phones: JEfferson 8829—RYan 1-7035
RANCH OFFICE: Coleville, California—Phone 141
PHOENIX, ARIZONA: Tovrea Stock Yards Bldg.
Lowered mineral content in winter rations increases need for supplemental phosphorus

Winter range and forage seldom supply sufficient phosphorus to keep cattle in good condition. Mild deficiencies are not easily recognized. The symptoms of marked deficiency may not occur until after body reserves are badly depleted.

Cattlemen and Experiment Station tests rate DIGESTA-BONE the best and most economical source of good phosphorus for supplemental mineral feeding.

As little as 2 or 3 cents a day will buy all the DIGESTA-BONE necessary to furnish all the supplemental phosphorus and calcium an average animal needs to offset the shortage in its rations.

You will find that free-choice feeding the mixture indicated by the animal's condition is highly effective.

The right mixture will certainly help maintain peak health . . . speed gains per unit of intake . . . stimulate fertility and promote the dropping of a larger and sturdier calf-crop.

MARKED DEFICIENCIES
3 parts DIGESTA-BONE .......... 1 part Salt

MILD DEFICIENCIES
2 parts DIGESTA-BONE .......... 1 part Salt

NORMAL MAINTENANCE
1 part DIGESTA-BONE .......... 1 part Salt

CONSOLIDATED CHEMICAL INDUSTRIES INC.
111 SUTTER STREET
PACIFIC DIVISION
SAN FRANCISCO 4